

Safety Perceptions Index 2023

Understanding the impact of risk around the world



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Executive Summary

The Lloyd's Register Foundation Safety Perceptions Index (SPI) provides a comprehensive assessment of worries and experiences of risk across 121 countries. The SPI is a unique body of work, providing a deeper understanding of citizens' feelings of safety than any other publicly available source. The index is produced by the Institute for Economics and Peace (IEP) on the basis of data from the World Risk Poll, a global survey designed by the Lloyd's Register Foundation and administered by Gallup.

This is the second edition of the SPI. The report analyses two iterations of the World Risk Poll, the first conducted in 2019 and the second conducted in 2021; providing commentary, trends, and insights into these two sets of data. One of the defining features of the research is that one survey was administered prior to the onset of COVID-19 and the other was administered afterwards, allowing for an analysis of the effects of the pandemic on perceptions of risk. This report will be useful in the decades ahead as it will give insight into likely shifts in perceptions of risk for any future pandemics that may occur.

The SPI measures two themes, *worry* about harm and recent *experience* of serious harm, analysing them across five domains: *food and water*, *violent crime*, *severe weather*, *mental health*, and *workplace safety*. These themes and domains are combined into a composite score which reflects perceptions of safety by country and region.

The past several years have been characterised by rising feelings of uncertainty worldwide. Central to this shift has been the COVID-19 pandemic, which disrupted the functioning of social institutions as well as patterns of individual and collective behaviour in countless ways.¹ Multiple studies have shown that the pandemic brought about increased levels of fear and anxiety across groups.²

Against this backdrop, **there are two central findings of the 2023 SPI report.** The first is that there were two parallel developments in people's perceptions of safety over the last several years. On the one hand, the index showed no meaningful change in levels of *worry* and *experience* of harm in the aggregate, with an improvement of less than 0.1 percentage points recorded between 2019 and 2021. On the other hand, complementary data from the World Risk Poll points to a notable rise in generalised and non-specific feelings of fear and lack of safety throughout the world, with people becoming more fearful overall but less certain about the sources of potential threats.

On this note, the report finds a rise in "ambiguous risk". This refers to people's sense that risk exists in the world around them but that it cannot always be defined. The rise in ambiguous risk can be seen in the responses to a World Risk Poll question on the greatest perceived threat in people's daily lives. Between 2019 and 2021, the largest changes in response rates were for those saying that no risk existed in their lives, which fell by half, and those saying they did not know what their greatest risk was, which nearly doubled.

The second key finding is that, despite the negligible overall change, there were larger shifts in scores for the individual

domains and the themes within those domains. While it was not possible to measure changes in one domain, *workplace safety*,³ among the four others, two improved and two deteriorated. The *mental health* domain recorded the largest deterioration, while the *violent crime* domain recorded the largest improvement. These results may in part be attributed to COVID-19, as the pandemic and ensuing lockdowns affected people's mental wellbeing, while less physical contact and interaction have likely led to reductions in violent crime. As COVID-19 only ranked as the fourth most commonly cited threat to people's daily safety, these findings suggest that it was the societal experience of the pandemic – more than the virus itself – that most impacted worries and experiences of risk.

Both *worry* and the *experience* of harm in relation to the *food and water* domain improved. However, these overall improvements represent averages across all of the countries surveyed and do not fully reflect the deteriorating food security and water stresses in certain vulnerable parts of the world. Low-income and conflict-ridden countries have recorded substantial deteriorations. Global undernourishment rates, for example, have been increasing since 2017 and reached over 750 million people in 2021, with 89 per cent of undernourished people residing in sub-Saharan Africa.⁴ Moreover, the survey was completed prior to the Russian invasion of Ukraine, which has significantly stressed global food supply chains.

In 2021, more people experienced harm in the *severe weather* domain than in 2019, but levels of *worry* in the domain decreased. This finding aligns with a slight decline between 2019 and 2021 in concerns about the future impacts of climate change, which the World Risk Poll data also showed. These developments further suggest that the pandemic shifted perceptions of risk and likely displaced worries about perceived future threats with ones that were more immediate. Nevertheless, the marginal nature of the decline in climate concerns,⁵ even in the face of the immediate worries associated with the pandemic, could also be seen as a reflection of the effectiveness of global communications strategies to highlight the threat posed by climate change.⁶

The worst scoring country in the 2023 SPI was Mali, which has experienced two recent coups and has been racked by multiple violent conflicts. On average, sub-Saharan Africa was the worst scoring region in the SPI; all of the five countries with the worst scores are located in the region, with four of them currently suffering from violent conflict.

There was less regional concentration in relation to the countries that performed best. The five countries with the best SPI scores comprise one from the Russia and Eurasia region, two from the Middle East and North Africa, and two from Europe. Uzbekistan was the best scoring country overall and, on average, the Russia and Eurasia region had the best scores of any region. This is a noteworthy result, given that countries in the Russia and Eurasia region do not typically rank highly in other measures of security and development. Their strong SPI scores were driven by their low rates of reported experience of harm.

SPI scores were also closely aligned with levels of peacefulness. This was true for both *worry* and *experience*. On average, very high peace countries recorded the best scores, and scores become progressively worse as levels of peace decline. This trend holds true across all domains except for *mental health*. Very high peace countries and very low peace countries had the highest rates of risk impact related to mental health concerns, while the middle peace countries had the lowest.

Between the two surveys there was a notable 4.2 percentage point increase in the number of people stating they felt less safe than at an earlier stage of their lives. The country with the biggest increase was Myanmar, where 58.7 per cent of the population felt this way in 2021, compared to 11.4 per cent in 2019. Myanmar was followed by Armenia, Vietnam, Nigeria and Turkey.

While the single most common response to the question about the greatest risk in people's lives was "don't know", road accidents were the most commonly cited specific answer, followed by crime and violence and then by non-COVID-related health issues. COVID-19 was the fourth most commonly cited top risk. Financial and economic concerns were treated as two separate categories in the World Risk Poll data, but had they been combined, they would have constituted the third most commonly cited risk. Moreover, both of these categories increased over the two years.

Although road accidents were rated as the greatest risk, it was also the area that had the largest improvement between the two surveys, with the percentage of respondents citing it as their greatest risk dropping from 17.9 per cent to 12.9 per cent. Many factors may have affected this result, including short-term trends like less road traffic due to COVID-19 and longer-term trends like improved car safety features and better road safety regulations.

In contrast to the 2019 World Risk Poll, which only measured the experience of harm based on a combined rate of first-hand and second-hand experience, the 2021 data provides disaggregated rates for the two. As such, in addition to overall experience rates, this edition of the SPI includes additional analysis on the basis of first-hand experience only.

In all five domains, *worry* exceeded first-hand experience, with the highest difference occurring in the *violent crime* domain, where rates of *worry* were more than six times higher than rates of first-hand experience. This is not necessarily surprising as the effects of *violent crime* can be severe, but also because expectations are often inflated by the levels of violence reported in news media and presented in entertainment programs.

Workplace safety was the only domain where the *worry* rate was not more than twice as high as the first-hand experience rate; in fact, *worry* and first-hand experience were basically on par for *workplace safety*, with the *worry* rate standing at 10.4 per cent, compared to a first-hand experience rate of 10.3 per cent.

Anxieties associated with employment and economic conditions rose between 2019 and 2021, which is unsurprising in light of the economic downturns precipitated by the pandemic. Over the two years, global unemployment rates increased from 5.4 per cent to 6.2 per cent, with youth experiencing the largest increase in unemployment. Unemployed people struggled the most on their present income, with 63.3 per cent struggling. This was followed by underemployed workers and full-time self-employed people. People of all employment statuses also became more dissatisfied with their current living conditions over the two years, though the largest increase occurred for people working full-time for employers, for whom dissatisfaction rates rose from 21.6 per cent to 30.7 per cent.

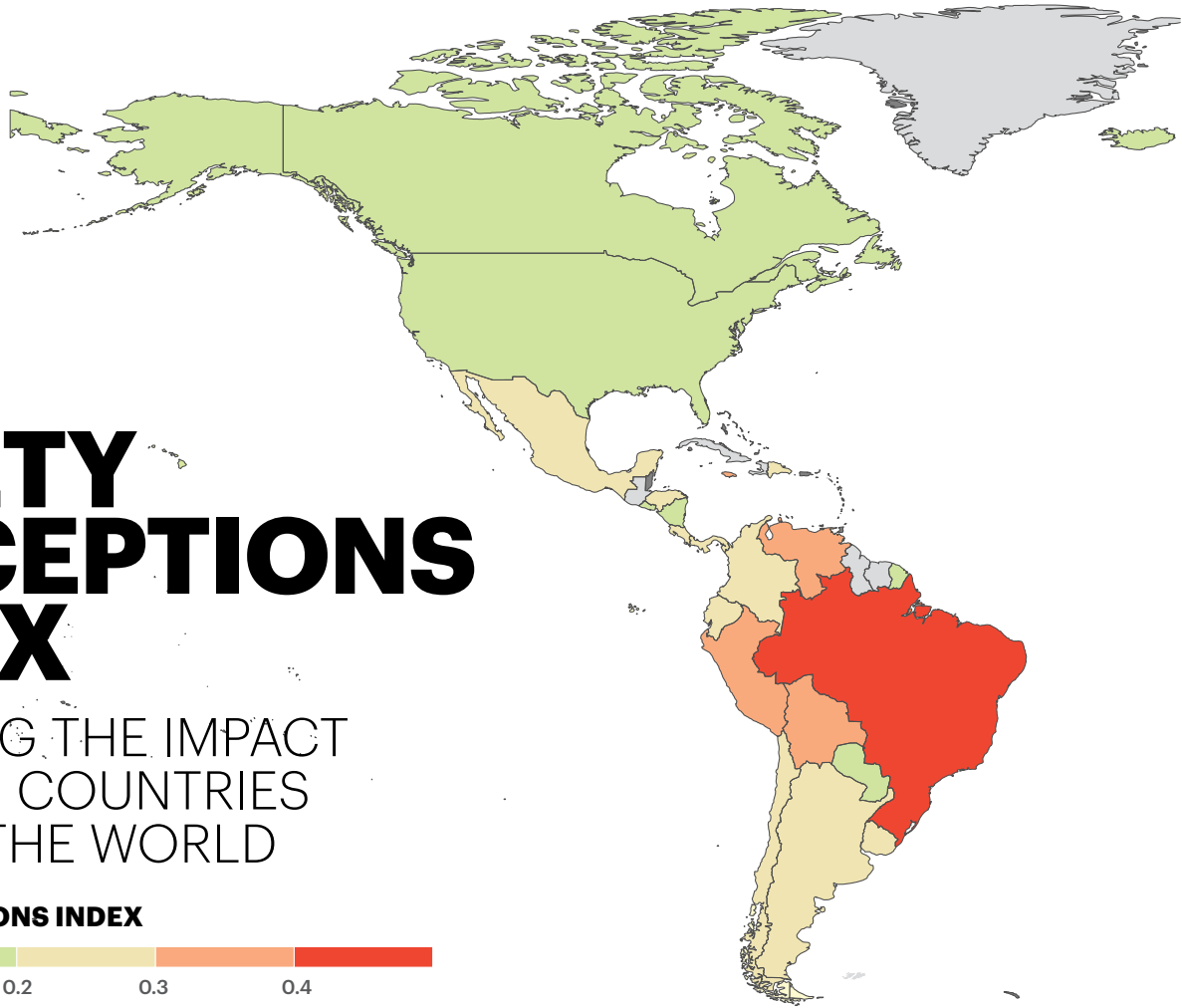
The 2023 SPI highlights the changing dynamics of risk that accompanied the onset of the COVID-19 pandemic. The world is less certain about its future than at any time since the Cold War. The pandemic continues to impact every corner of the globe, inflation is rising, the Ukraine war has disrupted international relations, and economic growth has slowed and in some cases reversed. These global events will continue to shape the risk landscape at the local, national and international levels, highlighting the need for ongoing measurement and analysis of citizens' perceptions of the threats they face in their daily lives.

BOX A

World risk poll R package

This report forms part of a broader multi-year collaboration between the Lloyd's Register Foundation and IEP to better understand how perceptions of safety differ across countries, and how the different aspects of risk are connected.

As part of this work, IEP has released an R package to allow researchers and practitioners easy access to the data and various aggregations. This package can be installed from <https://github.com/githubIEP/wrp>.



SAFETY PERCEPTIONS INDEX

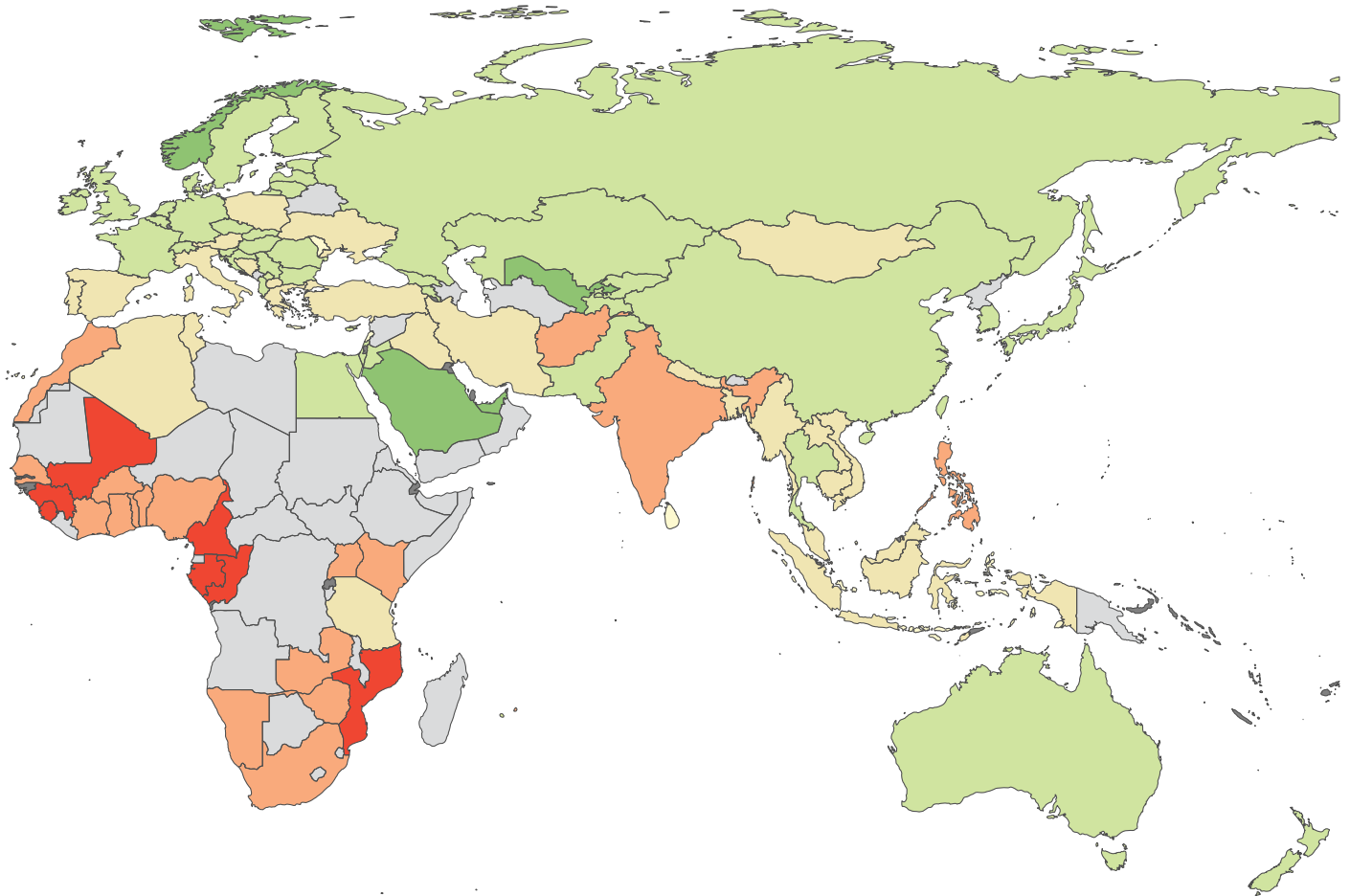
CAPTURING THE IMPACT OF RISK IN COUNTRIES AROUND THE WORLD

SAFETY PERCEPTIONS INDEX



Source: IEP, Lloyd's Register Foundation World Risk Poll

RANK	COUNTRY	SCORE	RANK	COUNTRY	SCORE	RANK	COUNTRY	SCORE
1	● Uzbekistan	0.072	22	● Japan	0.145	43	● United States of America	0.187
2	● United Arab Emirates	0.073	23	● Israel	0.146	44	● Kosovo	0.190
3	● Saudi Arabia	0.093	24	● United Kingdom	0.148	45	● Paraguay	0.191
4	● Norway	0.098	25	● Jordan	0.154	=45	● Serbia	0.191
5	● Estonia	0.100	26	● Kyrgyz Republic	0.155	47	● Bulgaria	0.192
6	● Singapore	0.101	27	● Netherlands	0.156	48	● Germany	0.194
7	● Iceland	0.109	=27	● Romania	0.156	=48	● Russia	0.194
8	● Sweden	0.111	29	● Australia	0.159	50	● South Korea	0.195
9	● China	0.113	=29	● Pakistan	0.159	=50	● Slovakia	0.195
10	● Denmark	0.116	31	● Ireland	0.161	52	● France	0.197
11	● Lithuania	0.119	=31	● Egypt	0.161	=52	● Cyprus	0.197
12	● Hungary	0.123	33	● Canada	0.163	54	● Nicaragua	0.199
13	● Armenia	0.127	34	● New Zealand	0.164	55	● Laos	0.203
14	● Kazakhstan	0.128	35	● Malta	0.166	=55	● Lebanon	0.203
15	● Taiwan	0.129	36	● Finland	0.167	57	● Sri Lanka	0.206
=15	● Czech Republic	0.129	37	● Croatia	0.172	58	● Uruguay	0.210
17	● Tajikistan	0.130	38	● Thailand	0.174	59	● Austria	0.211
18	● Belgium	0.132	39	● El Salvador	0.175	60	● Panama	0.213
19	● Latvia	0.135	40	● Albania	0.176	61	● Algeria	0.214
20	● Hong Kong	0.136	41	● Slovenia	0.183	62	● Bosnia and Herzegovina	0.215
21	● Georgia	0.138	42	● Switzerland	0.184	63	● Poland	0.218



RANK	COUNTRY	SCORE
64	North Macedonia	0.219
65	Ukraine	0.221
66	Tunisia	0.222
67	Malaysia	0.224
68	Mongolia	0.225
69	Moldova	0.239
70	Spain	0.240
71	Vietnam	0.241
=71	Myanmar	0.241
73	Costa Rica	0.244
=73	Nepal	0.244
75	Iran	0.248
76	Honduras	0.250
77	Italy	0.258
78	Chile	0.265
79	Bangladesh	0.267
80	Argentina	0.268
=80	Portugal	0.268
82	Indonesia	0.270
83	Cambodia	0.274
84	Turkey	0.275

RANK	COUNTRY	SCORE
85	Dominican Republic	0.282
86	Tanzania	0.283
87	Greece	0.287
88	Iraq	0.292
=88	Colombia	0.292
90	Mexico	0.299
91	Ecuador	0.300
92	Venezuela	0.302
93	Mauritius	0.303
=93	Peru	0.303
95	Togo	0.306
96	Jamaica	0.308
97	India	0.320
98	Bolivia	0.333
99	Côte d'Ivoire	0.339
100	Morocco	0.341
101	Kenya	0.358
102	Benin	0.362
103	Senegal	0.364
104	Nigeria	0.367
105	Ghana	0.369

RANK	COUNTRY	SCORE
106	Zimbabwe	0.371
107	South Africa	0.373
108	Uganda	0.381
109	Namibia	0.382
110	Zambia	0.396
=110	Burkina Faso	0.396
112	Philippines	0.397
=112	Afghanistan	0.397
114	Cameroon	0.403
115	Brazil	0.416
116	Gabon	0.426
117	Mozambique	0.436
118	Republic of the Congo	0.451
119	Guinea	0.467
120	Sierra Leone	0.502
121	Mali	0.587

Introduction

In a time of rising uncertainty, it is important to understand perceptions of safety across different regions, countries and demographic groups, and to examine how different risks relate to each other and to global events, such as the COVID-19 pandemic. The risks the world faces are not evenly distributed, and attitudes toward them vary significantly from country to country. The Lloyd’s Register Foundation World Risk Poll data shows that for certain types of risk, some countries are relatively tolerant of uncertainty and danger while others are highly risk averse.

On the basis of this dataset, which allows for broad comparison across countries and regions, the Safety Perceptions Index (SPI) has been developed as a composite measure of how risk affects perceptions of safety around the world. Its aim is to better understand risk in the aggregate – how different types of risk are related, how perceptions of safety vary by country and region, and how risks connect to the broader socio-economic environment, including levels of peacefulness.

The index itself draws on 12 questions from the World Risk Poll, focusing on everyday risks with the potential to cause significant disruptions to the lives of people throughout the world. In addition, the overall report draws on a variety of other questions from the World Risk Poll, as well as complementary data from other sources, to give greater understanding and meaning to the findings.

There are five domains in the SPI, which broadly cover threats related to health, security, and the social and physical environment. These are: *food and water*, *violent crime*, *severe weather*, *mental health*, and *workplace safety*. While these domains are not an exhaustive collection of all risks, they do cover those that people are likely to face in their daily lives and that could result in serious harm. Each of the five domains has two cross-cutting themes – *worry* and *experience* – which together provide a fuller measure of perceptions of safety. The framework underlying the SPI is outlined in Figure A.

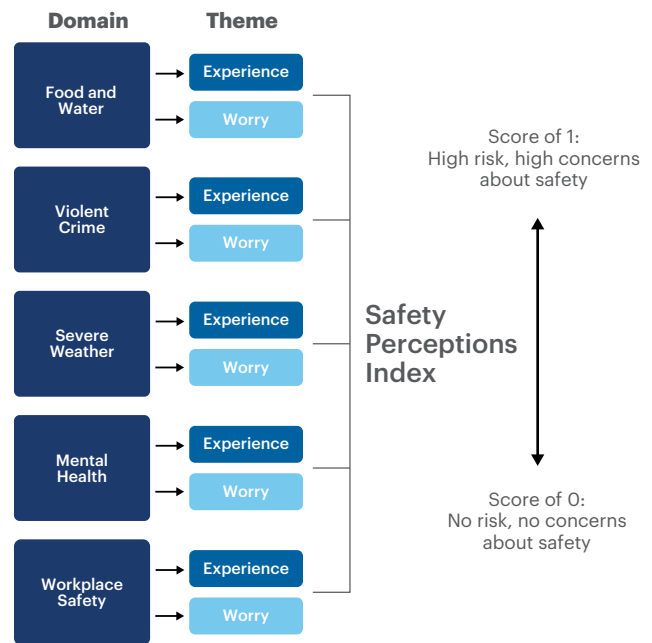
Each country’s overall index score is an average of its *experience* and *worry* levels, each of which is in turn an average of rates across the five domains, and a country’s final index score therefore stands between 0 and 1. As such, to achieve a perfect score of 0, none of the respondents from that country would report being very worried about any of the risks and none would have experienced serious harm or personally known someone who had experienced serious harm from that risk in the previous two years. Conversely, to achieve the maximum score of 1, every respondent would have to report being very worried about each risk and have experienced serious harm or personally known someone who has from each risk in the previous two years.

The global SPI scores shown in this report are based on unweighted averages across the 121 surveyed countries, meaning that rates of *experience* and *worry* in high-population countries are counted equally to those in low-population countries. Scores and rates at the regional level and by peace-level groupings are

FIGURE A

Safety Perceptions Index Framework

The SPI measures the levels of *worry* and recent *experience* of serious harm across five domains: *food and water*, *violent crime*, *severe weather*, *mental health* and *workplace safety*.



also based on unweighted averages of all relevant countries. Because this approach is distinct from that of other Lloyd’s Register Foundation World Risk Poll reports, in which global and regional averages reflect the relative weight of different countries’ populations, certain figures listed here differ slightly from those found in those reports.

In contrast, the global rates for different demographic groups shown in this report, which do not form part of the SPI scores, are weighted by country populations. This means that response rates shown for different age groups, sexes and similar categories are reflective of the total populations of all the surveyed countries. Where applicable, charts depicting rates weighted by country populations and those depicting rates that are unweighted have been labelled accordingly.

With regard to the relationship between levels of *worry* and levels of *experience* in measuring the impact of risk, a composite index that focused only on experiences of harm would not fully capture that risk’s impact on a person’s daily activity. A disconnect between the experience of a risk and worrying about that risk should not necessarily imply that worry is unfounded. For example, a society with high levels of private security and a populace too afraid to go out at night might have low levels of violence only because of the risk mitigation strategies that people take to avoid it. For more information on how the index was constructed, which indicators were used, and the importance of the cross-cutting themes, see the Methodology section at the end of this report.

This report draws on both the 2019 and the 2021 World Risk Polls. Some of the differences between the two – and their implications for the SPI – are highlighted in Box 1.1. Because it is the first SPI report to benefit from longitudinal data, it offers not only a snapshot of safety perceptions around the world, but also a view into how safety perceptions shifted over the last

several years. Crucially, the time series covers the periods before and after the onset of the COVID-19 pandemic. It thus provides insight into how the pandemic affected the risk landscape globally, revealing a mixed picture – with both expected and unexpected results.

BOX 1.1

Differences between the 2022 and 2023 Safety Perceptions Indices

Omission of questions on perceived *likelihood* of future harm

For a variety of questions in the 2019 World Risk Poll, including those that form the basis of the five domains of the SPI, respondents were asked about three related subjects: 1) their *experience* of serious harm in the recent past, 2) their *worry* about harm in the present, and 3) the perceived *likelihood* that a given harm would befall them in the near future. For the previous SPI report, these three themes served as the basis for the calculation of the overall risk impact score for each domain. However, in the 2021 iteration of the World Risk Poll, the questions on *likelihood* were omitted. For this reason, the present report calculates risk impact on the basis of *experience* and *worry* only, and also compares the 2021 scores to the 2019 scores on this basis. For these reasons and the reasons above, many of the 2019 global, regional and country-level figures and scores shown in this report differ from those presented in the 2022 SPI.

Reduction in number of countries

The previous edition of this report, the 2022 SPI, drew on data from the 2019 World Risk Poll only, while the present report draws on both that poll and the 2021 World Risk Poll. The second survey featured fewer countries than the first (121 in 2021 vs. 142 in 2019), with 119 of these

appearing in both waves. This means that two countries – the Czech Republic and Iceland – were surveyed in 2021 but not in 2019. The Methodology section outlines the ways in which this change in the composition of countries has been accounted for in calculating the regional and global 2019 scores as well as the other trended analyses in the report.

Change in *workplace safety* questions

The 2019 World Risk Poll included questions related to experiences of harm in the workplace and these were featured in the 2022 SPI, but it included no questions on worries related to workplace harm, so there was no *worry* theme for *workplace safety* in that report. Moreover, while there were a series of questions on experiences of harm in the workplace in the 2019 survey and these were included in the scores of the 2022 SPI, the questions were worded differently and had different focuses than the *experience* question posed in the 2021 survey, which has been used in the calculation of the final scores of this report. As such, neither theme related to *workplace safety* has comparable figures between 2019 and 2021, so none of the 2019 *workplace safety* scores and no trended analyses related to *workplace safety* are included in this report. The Methodology section discusses the ways in which these changes have been accounted for in calculating the overall and theme-specific SPI scores for 2019.

1 | Results and Trends

The Safety Perceptions Index (SPI) measures five key risk domains: *food and water*, *violent crime*, *severe weather*, *mental health* and *workplace safety*. This report focuses specifically on two themes – *worry* and *experience of serious harm* – for each of these five domains. The domain scores are averaged to create a country composite score.

The SPI provides the ability to rank countries by levels of perceived risk by the five domains individually, by the average scores across the domains, and by the average *worry* and *experience* theme scores. Scores range between 0 and 1, with a high score indicating a high level of risk impact. For example, if for a given domain, 10 per cent of a population reported *experience* of harm and 20 per cent reported significant *worry* about that harm, then that population would record a domain score of 0.150.

The report analyses the two iterations of the Lloyd’s Register Foundation World Risk Poll data from 2019 and 2021 to better understand trends. One of the defining features of the research is that one survey was administered prior to the onset of COVID-19 and the other was administered afterwards, allowing for an analysis of the effects of the pandemic on perceptions of risk.

Figure 1.1 provides the summary of the changes in the SPI scores for the five domains and two themes between 2019 and 2021, as well as for the average global score. As can be seen, the overall risk score was virtually unchanged between the two years, falling from 0.2384 in 2019 to 0.2376 in 2021, equivalent to a less than 0.1 percentage point improvement. The average SPI score improved in two domains – *food and water* and *violent crime* – and deteriorated in two – *severe weather* and *mental health*. The fifth domain, *workplace safety*, did not have comparable

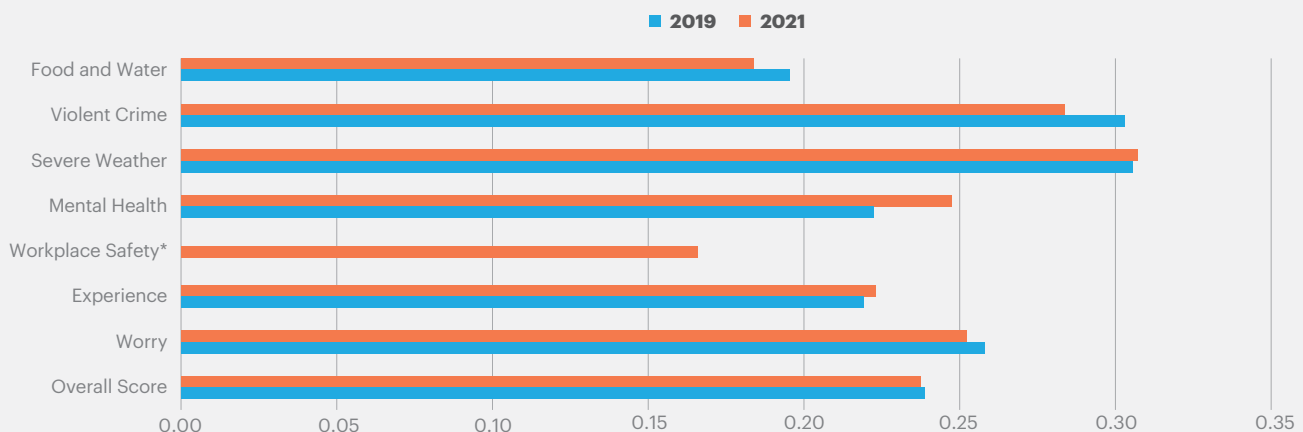
questions on harm *experience* and *worry* in 2019. Uzbekistan recorded the best overall score, at 0.072, while Mali recorded the worst overall score, at 0.587. Mali is currently suffering from a violent internal conflict, has high rates of terrorism, and saw its government overthrown in successful coups in both 2020 and 2021.

Counterintuitively, the overall SPI score improved following the onset of COVID-19. This result can in part be explained by the ways in which the pandemic reduced real or perceived threats in several key domains. Specifically, with the significant reductions around the world in people’s presence in public places, it is unsurprising that the *violent crime* score improved. Figure 1.2 shows that levels of both *worry* and *experience* in this domain fell between 2019 and 2021.

More generally, as every person has finite mental capacity to worry, the spread of the virus may have ended up displacing *worry* across some of the domains of the SPI. This dynamic can be seen in the fact that the average level of *worry* about severe weather events fell by 1.7 percentage points, even as *experience* of harm from such events actually rose by 2.1 points. In contrast, the only SPI domain in which the average levels of both *worry* and *experience* of harm increased was the *mental health* domain, which is to be expected given the extent of global COVID-19 lockdowns and other disruptions to regular social life. Average global levels of *worry* and *experience* of harm related

FIGURE 1.1
Safety Perceptions Index scores, 2019 and 2021

There was a negligible improvement in the impact of risk globally between 2019 and 2021, with two domains registering improvements in scores.

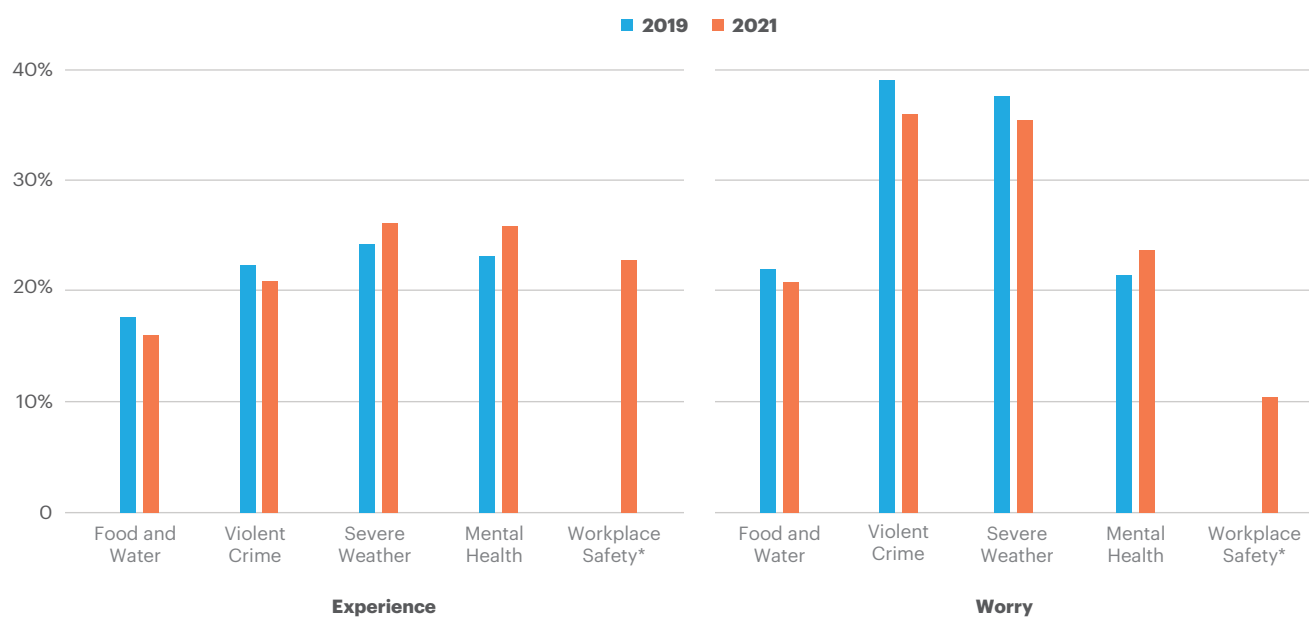


Source: World Risk Poll; IEP calculations
 Note: Averages across 121 countries, unweighted by country populations.
 *The World Risk Poll did not have comparable questions on workplace harm experience and worry in 2019.

FIGURE 1.2

Average experience and worry rates, by domains, 2019 and 2021

Mental health was the only SPI domain to experience increases in levels of both worry and experience between 2019 and 2021.



Source: World Risk Poll; IEP calculations

Note: Averages across 121 countries, unweighted by country populations.

*The World Risk Poll did not have comparable questions on workplace harm experience and worry in 2019.

to *mental health* rose in tandem, by 2.4 and 2.5 percentage points, respectively. A variety of other studies have also found significant increases in harm from *mental health* conditions precipitated by the pandemic. The World Health Organisation (WHO), for example, estimates that it led to a 25 per cent increase in rates of anxiety and depression in some places, with women and young people hit the hardest by stresses associated with COVID-19.

In both years, the domains with the largest overall risk scores were *violent crime* and *severe weather*. In both cases, their high scores were from their high levels of *worry*, as the levels of *experience* associated with them were on par with the other domains. Across the domains, most *worry* and *experience* rates were well below 30 per cent. The exceptions were the *worry* rates for *violent crime* and *severe weather*, which stood at between 35 and 40 per cent in both 2019 and 2021. The *workplace safety* domain, which is associated with relatively high levels of *experience* of harm, ranked lowest in 2021 as a result of its low *worry* rates. The relationships between *worry* and the *experience* of harm, both first-hand and second-hand, are discussed in greater detail in Section 2.

Scores by country and region

Figure 1.3 shows the countries with the highest and lowest SPI scores, both overall and by domain, as well as the highest and lowest *worry* and *experience* levels, both overall and by domain. Mali ranks as the most risk-impacted country in the SPI, registering among the highest *worry* rates for all five domains and among the highest *experience* rates in all but one domain: *food and water*. In contrast, Uzbekistan ranks as the least risk-impacted country, driven by its low levels of reported *experience* of harm. There are three domains for which Uzbekistan has

among the lowest *experience* rates in the world – *violent crime*, *severe weather*, and *mental health* – although it does not figure among the countries with the lowest *worry* rates for any domain.

In general, sub-Saharan African countries are the most risk-impacted in the world. For *experience*, while Afghanistan has the highest average score of any country, the other four of the five highest ranking countries are located in sub-Saharan Africa. This largely holds true across the domains, with the only exception being the *mental health* domain, where European countries have three of the five highest *experience* rates. Sub-Saharan African countries also make up the majority of the countries with the highest *worry* rates, occupying the five worst spots in all but two domains – *violent crime* and *severe weather* – for which they hold four of the top five spots.

FIGURE 1.3
Highest and lowest country scores and rates, 2021

Mali is the most risk-impacted country in the SPI, while Uzbekistan is the least.



Source: World Risk Poll; IEP calculations

There is less regional concentration in relation to the countries that are least impacted by risk. The five countries with the lowest SPI scores comprise one from Russia and Eurasia, two from the Middle East and North Africa, and two from Europe.

European countries, and specifically Nordic countries, make up the majority of the countries with the lowest average *worry* scores. Nordic countries constitute the majority in every domain except for *mental health*, for which only one, Sweden, is represented. The low *worry* rates in these countries are in some ways unsurprising, given that they are characterised by high levels of economic development and social equity, trusted and high-quality public services, low levels of crime, and broad-based societal peacefulness.⁴ As such, people in such places may perceive the likelihood of encountering harms from different risk domains as lower, and they might justifiably count on their countries' social systems to mitigate the severity of many harms. With regard to low levels of reported *experience* of harm, countries in the Russia and Eurasia region feature prominently. They occupy three of the five lowest spots for overall *experience*, despite representing only one-thirteenth of the countries surveyed, and they also figure among those with the lowest rates of *experience* of harm in every domain except for food and water. Across the five domains, the region has an average rate of *experience* of harm of 12.7 per cent, ten points lower than the global rate of 22.9 per cent.⁵ Driven by its low harm *experience* averages, the Russia and Eurasia region is the best scoring region in the SPI, as shown in Figure 1.4.

It is not fully clear why countries in this region record such low levels of *experience* of harm. Overall, the region performs much better in the SPI than on other global indices of development, wellbeing and safety. For example, the region has only middling Safety and Security scores in the Global Peace Index.⁶ For most other countries, measures of these kind tend to correlate strongly with low levels of risk, as shown in the previous edition of the SPI.⁷

There may be other cultural, linguistic and socio-political factors driving the low rates of reported *experience* of harm in Russia

and Eurasia, particularly in relation to how respondents in the region understand and report on risk. The 2019 edition of the World Risk Poll, for example, asked a question about whether hearing the word “risk” made respondents think more of “danger” or “opportunity”. Globally, 60 per cent of people thought more of danger, while 20.9 per cent thought more of opportunity. Across the surveyed countries of the Russia and Eurasia region, however, an average 32.7 per cent of people thought more of opportunity, the highest rate of any region, and in Uzbekistan, 72.9 per cent of people thought more of opportunity, by far the highest percentage of any country. Moreover, research on the conduct of surveys in Central Asia, and in Uzbekistan in particular, has found that respondents tend to feel pressure and wariness about how their responses might be used against them or the political leadership of their countries. At the same time, there are reportedly strongly held cultural beliefs that “garbage should not be taken out of the house for public display”.⁸

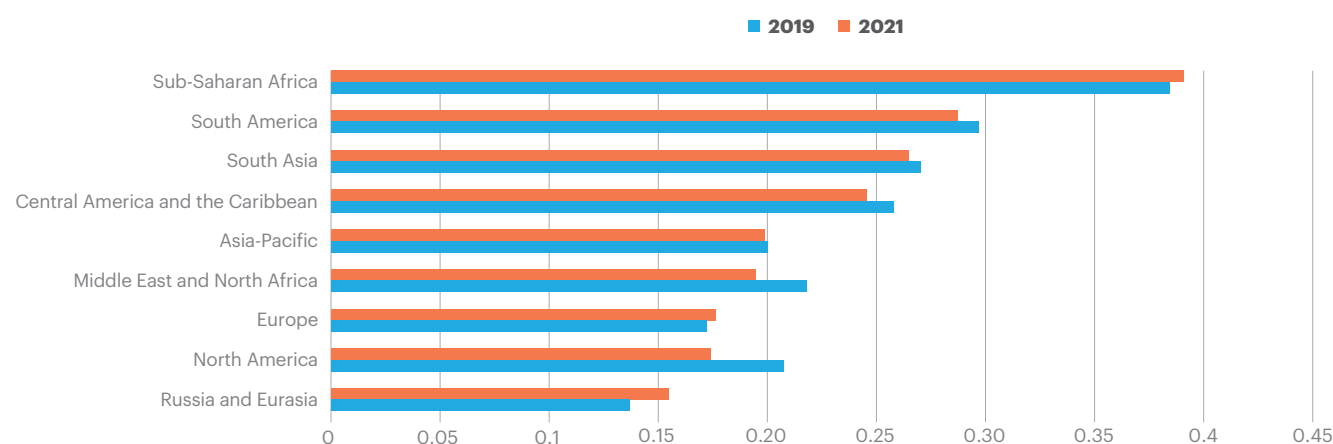
Despite registering the lowest regional score in the SPI, the Russia and Eurasia region experienced the largest deterioration in overall score of any region between 2019 and 2021. Between the two years, its score rose by 0.018, equivalent to 1.8 percentage points, driven by the largest regional increase in average *worry* rate and the second largest regional uptick in average *experience* of harm rate. This is particularly noteworthy given that most regions registered improvements in scores between 2019 and 2021, with six regions improving and three deteriorating.

The largest regional improvement occurred in North America, whose overall score improved by 3.4 percentage points. This improvement was driven by a 4.7 percentage point decline in North America's average *experience* of harm rate, by far the largest change in rate of any region. As shown in Figure 1.5, from 2019 to 2021, more countries improved their overall SPI scores, reporting less average *experience* of harm and less average *worry* about harm.

FIGURE 1.4

Regional average SPI scores, 2019 and 2021

Despite experiencing the largest deterioration in score of any region between 2019 and 2021, the Russia and Eurasia region had the best SPI scores in both years, driven by its low rates of reported experience of harm.



Source: World Risk Poll; IEP calculations

Note: Averages unweighted by country populations.

As previously mentioned, Mali reported the largest deteriorations in overall SPI score as well as in average rates of *experience of harm* and *worry about harm*. The country had its largest increase in *worry about food*, a sub-domain of the *food and water* domain, with 59.8 per cent of Malians expressing concern about harm from food safety or a lack of food in 2021, compared to 26.4 per cent in 2019. Despite this increase of 33.4 percentage points, which was the largest of any indicator across all countries, Mali's highest levels of *worry* were in the *severe weather* and *violent crime* domains in both 2019 and 2021. In the period between the two surveys, Mali has had a substantial increase in conflict and government instability. There were coups in both 2020 and 2021, Islamic jihadists are active in the country, and Western military support to fight the insurgents is being withdrawn. This ecological-conflict nexus is amplified by Mali's exposure to extreme weather events and high population growth, making Mali further exposed to food shortages and declining livestock. The extreme weather events are also associated with temperature increases, desertification and rapid deforestation.⁹

In contrast, Pakistan had the largest improvement in its overall SPI score, recording the largest declines in average rates of both *experience of harm* and *worry about harm*. The country improved across all domains for which there were comparable questions in both years (e.g. all domains except for *workplace safety*). Despite these improvements Pakistan continued to record a high level of *worry* in relation to water, a sub-domain of the *food and water* domain, with 30.8 per cent of Pakistanis expressing concern about the water they drink, substantially more than the global average of 20 per cent. Moreover, in 2021, Pakistan was the country with the second highest percentage of people, 2.8 per cent, saying that water supply and cleanliness issues were the greatest threat to their daily lives. In recent years, Pakistan has faced acute water shortages due to increasingly severe droughts, rapid population growth, urbanisation, climate change and poor water management. This has also contributed to *violent crime*, with water scarcity triggering conflict and resource competition.¹⁰ A 2021 government study found that 41 per cent of water sources across the country had bacterial contamination; as well as arsenic, nitrate and fluoride. Microbial contaminations like these are

attributed to old and dried-out pipelines and irrigation systems, where bacterium grows and multiplies in water supplies.¹¹

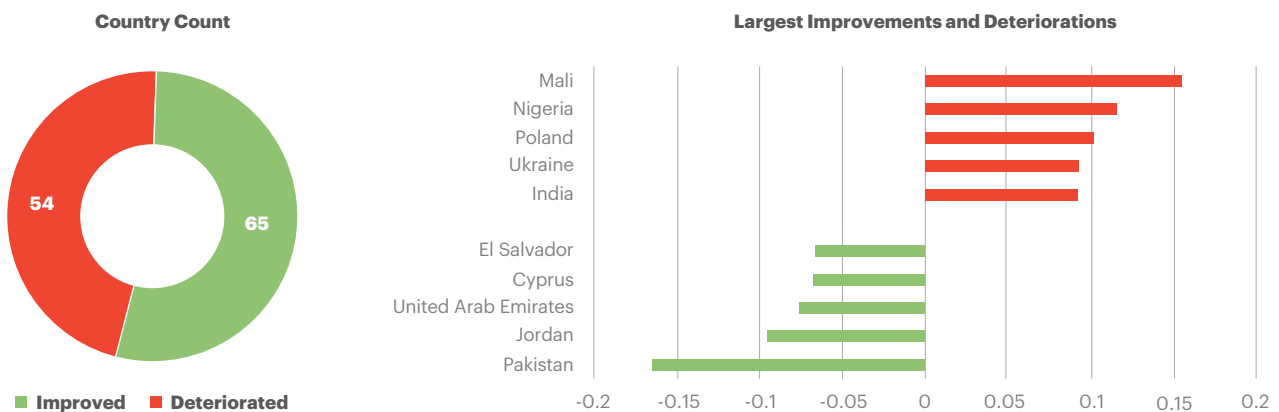
Changes in countries' SPI scores tended to diverge by their respective peace levels, with the majority of higher peace countries improving and the majority of lower peace countries deteriorating. Grouping countries by peace levels reveals striking results:

- Very high peace countries recorded the largest average improvement, with their SPI scores improving by 1.2 percentage points.
- These were followed by high peace countries, which improved by an average of one percentage point.
- Next came medium peace countries, which improved by an average of 0.9 percentage points.
- Low peace countries deteriorated on average by 1.4 percentage points.
- The worst outcome was recorded by very low peace countries, which deteriorated on average by 7.4 percentage points.

FIGURE 1.5

Improvements and deteriorations in SPI scores, 2019–2021

Between 2019 and 2021, most countries registered at least a slight improvement in their SPI scores.

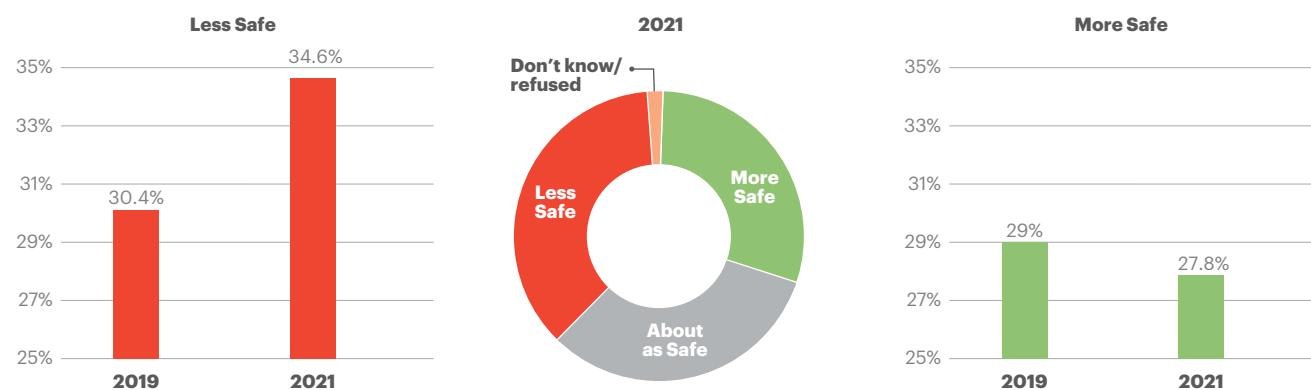


Source: World Risk Poll; IEP calculations

FIGURE 1.6

Feelings of safety in comparison with five years prior, 2019 and 2021

Between 2019 and 2021, there was a rise in the number of people feeling less safe than they did five years earlier.



Source: World Risk Poll; IEP calculations

Note: Averages weighted by country populations.

Perceptions of safety – the shifting risk landscape

Figure 1.6 shows the percentage of people in 2019 and 2021 stating that they felt less safe, more safe, or about as safe compared to five years prior. There was a notable increase in the percentage of people saying they felt less safe in 2021. In total, 34.6 per cent of people responded this way in 2021, compared to 30.4 per cent of people in 2019. Moreover, this increase occurred in the majority of countries, with 53.4 per cent of the countries surveyed showing higher rates of feeling less safe.

Many countries recorded substantial deteriorations in feelings of safety compared to five years earlier. The worst outcomes were the following:

- In Myanmar, 11.4 per cent of the population reported feeling less safe in 2019, but this rose to 58.7 per cent in 2021.
- In Armenia, the rate increased from 9.6 to 37.5 per cent.
- In Vietnam, it increased from 10.9 to 37.1 per cent.
- In Nigeria, it increased from 35 to 60.9 per cent.
- In Turkey, it increased from 34.5 to 50.1 per cent.

In contrast, the countries with the largest improvements were the following:

- In Sweden, the percentage of the population feeling more safe rose from 12 per cent in 2019 to 31.9 per cent in 2021.
- In Uruguay, the percentage rose from 10.8 to 30.5 per cent.
- In Zambia, it rose from 18.7 to 37.5 per cent.
- In Bulgaria, it rose from 16.7 to 34.9 per cent.
- In Norway, it rose from 9.9 to 26.3 per cent.

Greatest risk to people's daily lives

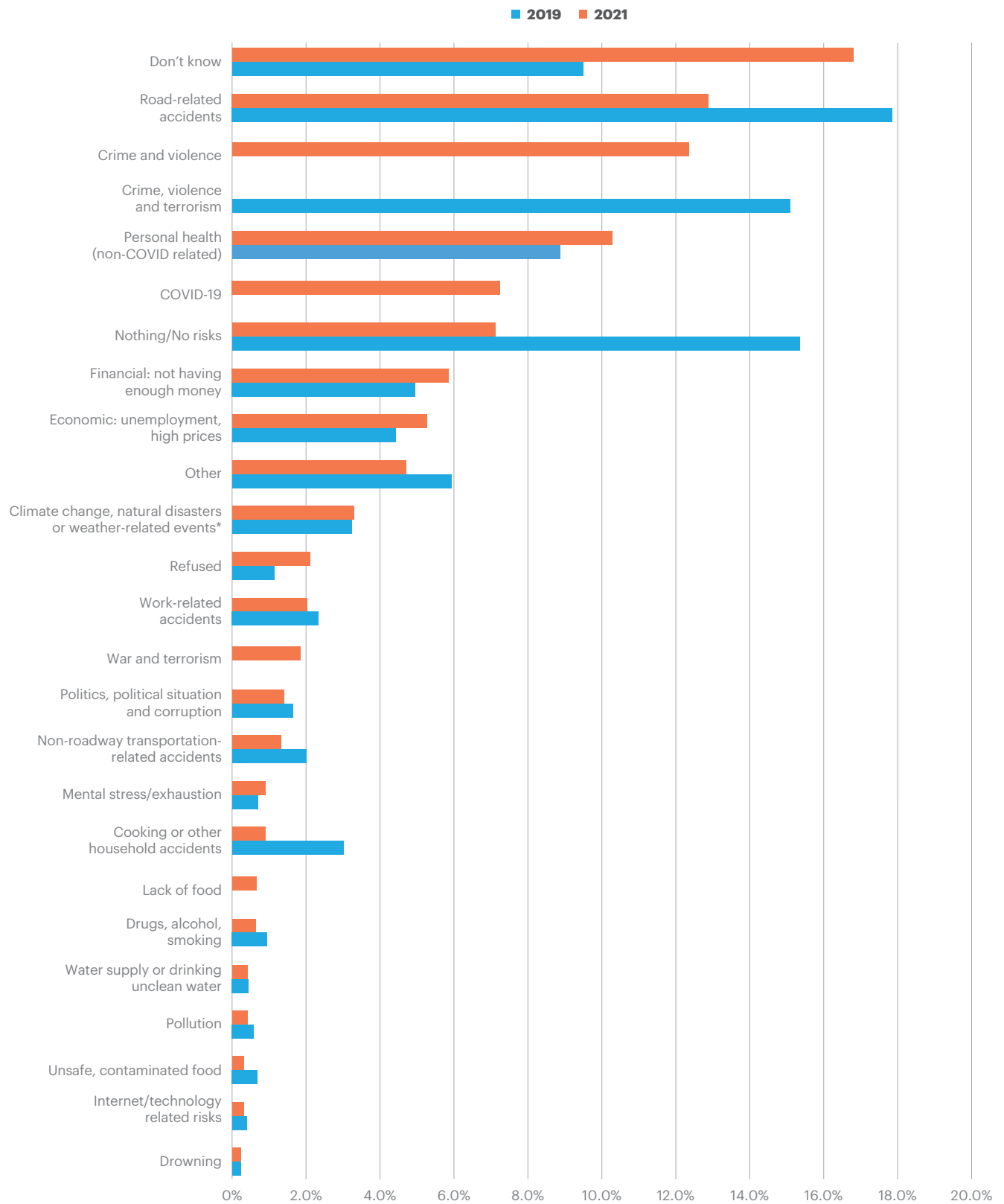
Another World Risk Poll question asks respondents to mention the risk that they see as the greatest threat to their everyday safety. Responses are then coded into one of over 20 possible options. Although there were a few minor changes in the coding categories between the 2019 and 2021 surveys,¹² the options largely remained the same, allowing for comparisons over time. Unsurprisingly, the most significant change between the two sets was the addition of COVID-19 in the 2021 survey.

But despite the pandemic's incalculably disruptive effects on people's lives around the world, the virus itself was only the fourth most commonly cited top risk in 2021, with 7.3 per cent of people calling it the biggest threat to their everyday safety. In both 2019 and 2021, road-related accidents represented the most commonly cited specific risk, with 17.9 per cent of people mentioning it in 2019 and 12.9 per cent of people mentioning it in 2021. Also in both years, violence-related risks and non-COVID-related health concerns represented the second and third most commonly identified top risks. These risks are shown in Figure 1.7.

FIGURE 1.7

Greatest perceived threats to daily safety, 2019 and 2021

Road-related accidents, crime and violence (and terrorism), and personal health concerns were the most commonly cited top risks in both 2019 and 2021.



Source: World Risk Poll; IEP calculations

Note: Averages across 121 countries, unweighted by country populations.

**"Climate change, natural disasters or weather-related events" was a single category in 2019, but in 2021 it was two separate categories: "Climate change or severe weather-related events" and "Non-weather-related natural disasters". The 2021 rate in the chart represents a sum of both categories. In contrast, while "crime, violence and terrorism" represented a single category in 2019, in 2021 there were two violence-related categories ("crime and violence" and "war and terrorism"); these are presented separately in the chart.

One of the key findings of this year's SPI is the rise of "ambiguous risk" (Box 1.1). Between 2019 and 2021, the largest change in the response rates of people's top concerns occurred in the "nothing/no risks" category, for which the response rate dropped from a 15.4 per cent response rate in 2019 to a 7.1 per cent response rate in 2021. In the process, it fell from the second

most common answer in 2019 to the fifth most common in 2021. Parallel to this, the second largest change was for the "don't know" option, for which the response rate rose from 9.5 to 16.8 per cent between the two years, making it the most common answer in 2021, after it was only the fourth most common answer in 2019.

BOX 1.1

Rise of ambiguous risk

Between 2019 and 2021, the rate at which people said they faced no great threat to their daily safety more than halved, while there was a near doubling in the rate at which they said they did not know what their greatest threat was. In addition to this swing being sizable, it was also widespread. The halving or near halving of the "nothing/no risks" rate and the doubling or near doubling of the "don't know" response rate was a trend that held true across all education levels and age groups, as well as for both women and men. Furthermore, of the 118 countries surveyed on this question, 95 countries or 80.5 per cent recorded declines in the rate in the "nothing/no risks" category, while 93 countries or 78.8 per cent registered increases in the "don't know" category, and 78 countries or 66.1 per cent registered both a decline in the former and an increase in the latter.

These changes indicate that, in a substantial majority of the countries of the world, fewer people believed that there was no risk present in their lives, even though they

may not have known what the main source of that risk was. This swing also suggests that the pandemic's impact on the risk landscape has been more indirect than direct. While the new fears about the virus itself were substantial, these larger changes point to the rise of what might be termed "ambiguous risk".

This is in part because pandemics can contribute to a rise in fears both by threatening personal safety and by upsetting routines and established patterns of thought. When a pandemic first begins, it tends to represent a new and poorly understood threat, and people are often not able to draw on previous experiences to make sense of it. As a result, the level of risk it poses can be difficult to calculate, which may lead to an increase in generalised and indeterminate fears. In the case of COVID-19, mandatory lockdowns for unknown stretches of time further aggravated feelings of unpredictability.¹⁴

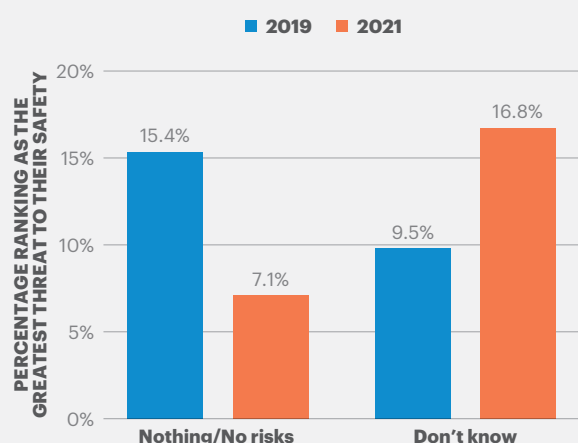
Perceptions of ambiguous risk were also fostered by the ways in which the COVID-19 pandemic aggravated a variety of mental health issues. In particular, rates of anxiety and depression rose, in large part as a result of increased uncertainty about the future as well as the loneliness associated with social distancing and isolation measures.¹⁵

The pandemic also resulted in increased usage of social media as a platform to connect with others and get news and updates.¹⁶ According to data from the World Risk Poll, the proportion of people globally that used the internet in the previous 30 days, including social media, rose from 51.8 per cent in 2019 to 60.6 per cent in 2021. Social media proved to be a valuable resource in helping keep friends and family connected to each other during a time of extreme isolation for many, while also serving as a platform for the sharing of crucial information in the face of heightened uncertainty. However, the rise of social media as a news source has also tended to amplify unreliable information. In the context of the pandemic, misinformation and misleading or inconclusive news may have contributed to heightened levels of distrust and uncertainty, thereby driving increases in specific and generalised feelings of stress and anxiety.¹⁷

FIGURE 1.8

Rise in ambiguous risk, 2019–2021

For a question on the top threat to daily safety, the largest decline in response rate was in the "nothing/no risk" category and the largest increase was in the "don't know" category.



Source: World Risk Poll; IEP calculations

While “don’t know” was the top response globally in 2021, “road-related accidents” was the top response in the most countries, with 27.5 per cent of the surveyed countries identifying it as such. In contrast, the top concern in the most countries in the previous World Risk Poll was “crime, violence and terrorism”, with 33.6 per cent of surveyed countries identifying it as their greatest risk.

Generally speaking, people’s safety concerns within and across countries are diffuse and diverse. In both years, it was rare for a single category of risk to garner at least 50 per cent of

responses within a country; just two countries did so in 2021 – “war and terrorism” in Afghanistan and “crime and violence” in Venezuela. However, the majority of countries had at least one category of risk that obtained at least a 25 per cent response rate.¹⁸

For each risk category, the countries with the highest and lowest response rates are outlined in Table 1.1. The most commonly cited top risk for every country surveyed is listed in the Appendix.

TABLE 1.1

Categories of top risks and countries with highest rates for each, 2021

Different forms of violence were chosen as the single top concern for a sizable majority of people in Afghanistan and Venezuela, while half of the people in the United Arab Emirates indicated that there was no great risk to their safety.

Risk	Country with the highest response rate	Response rate
Don't know	Laos	43.2%
Road-related accidents	Finland	45.6%
Crime and violence	Venezuela	59.7%
Personal health (non-COVID-19 related)	Lithuania	33.1%
COVID-19	Algeria	34.7%
Nothing/No risks	United Arab Emirates	49.7%
Financial: not having enough money	Sierra Leone	27.9%
Economy: unemployment, high prices, etc.	Lebanon	24.2%
Other	United States	27.1%
Climate change, natural disasters or weather-related events	Nepal	20.7%
• Climate and weather-related events (such as floods, drought, wildfires, etc.)	Nepal	16.8%
• Non-weather-related disasters (such as earthquakes, volcanoes, etc.)	Japan	4.2%
Refused	Dominican Republic	11.0%
Work-related accidents	Iceland	9.9%
War and terrorism	Afghanistan	62.1%
Politics, political situation, corruption	Lebanon	16.6%
Non-roadway transportation-related accidents	Switzerland	6.9%
Mental stress/exhaustion	Australia	7.9%
Cooking or other household accidents	New Zealand	12.7%
Lack of food	Burkina Faso	11.6%
Drugs, alcohol, smoking	United Kingdom	5.6%
Water supply or drinking unclean water	Ghana	3.4%
Pollution	Switzerland	1.8%
Unsafe or contaminated food	Sierra Leone	3.4%
Internet/technology related risks	France	4.9%
Drowning	Gabon	1.8%

Source: World Risk Poll; IEP calculations

2

Understanding Risk

The SPI measures the impact of risk in terms of both people’s experiences of serious harm in the recent past and their worry about it in the present. While rates of the *experience* of harm tend to be lower than rates of *worry*, the two are strongly correlated across countries. As shown in Figure 2.1, the average rate of recent *experience* of harm is strongly positively correlated with *worry* ($r=0.72$). This includes both first-hand and second-hand experience of harm. The correlation coefficient for first-hand harm is ($r=0.65$), while for second-hand harm it is ($r=0.61$). The distinction between first-hand and second-hand experience of harm is discussed in Box 2.1.

FIGURE 2.1

Overall and first-hand experience and worry about harm, 2021

Overall and first-hand experience are both strongly positively correlated with worry about harm.



Source: World Risk Poll; IEP calculations

BOX 2.1

Overall experience, first-hand experience and second-hand experience of harm

In the 2019 edition of the World Risk Poll, respondents were asked whether they or someone they know had experienced harm in the previous two years from a variety of potential threats, to which they could only answer yes or no, without distinguishing whether the harm was personally experienced or experienced by someone else. In the 2021 edition of the survey, however, respondents were given options to indicate whether they (1) had “personally experienced” harm, (2) “know someone who has experienced” harm, or (3) “both”.

In this report, recent *experience* – also called “overall experience” or “all experience” – refers to the sum of the response rates of all of these options, while “first-hand experience” refers to the sum of options 1 and 3. In contrast, “second-hand experience” refers to the rates at which respondents stated that they only knew of someone who had experienced harm (option 2).

Differences by domains

While *worry* tends to exceed overall *experience* of harm, it does not exceed it in all domains, as shown in Figure 2.2. *Violent crime* had the largest discrepancy of *worry* over *experience*. In contrast, overall *experience* exceeded levels of *worry* in two domains: *mental health* and *workplace safety*.

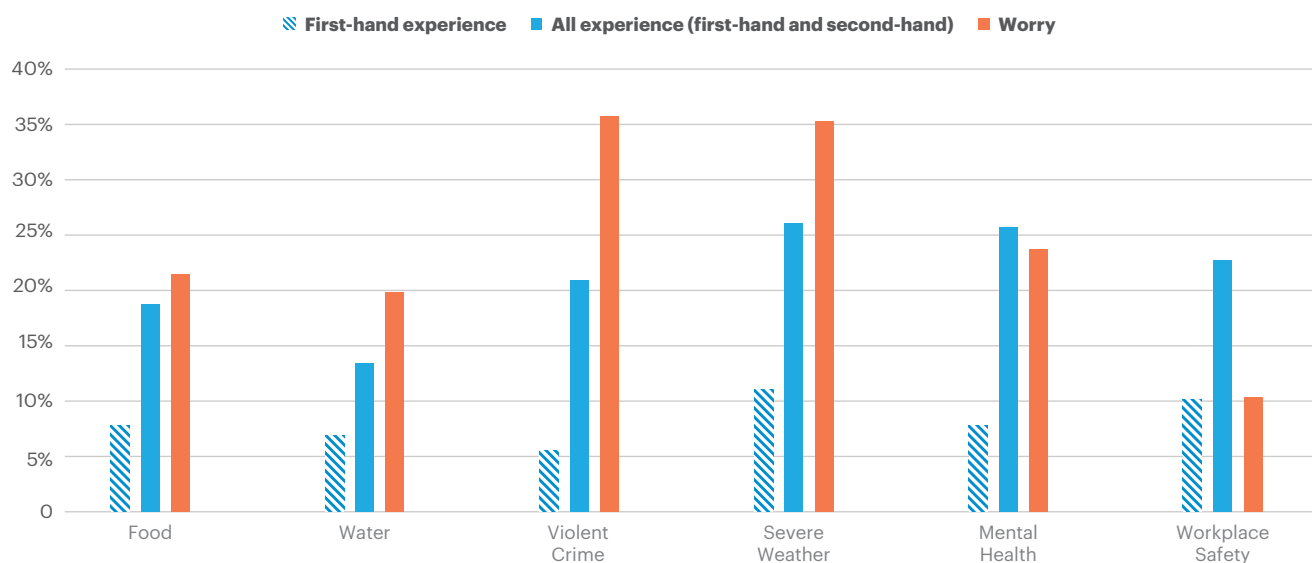
The average level of *worry* exceeds the average level of first-hand *experience* for all domains, however, the gaps between them range from as small as 0.2 percentage points in the *workplace safety* domain to as large as 30.2 percentage points in the *violent crime* domain. These relationships are outlined in Table 2.1, while Box 2.2 discusses the differences of absolute and relative relationships between levels of *worry* and *experience*.

Table 2.1 also shows that first-hand experiences of harm as a proportion of all known experiences vary markedly across domains. On average, the largest difference between first-hand experience and all experience was in the *violent crime* domain. Roughly one in four of all reported experiences in this domain were first-hand experiences. This is followed by the *mental health* domain, for which more than two out of three reported experiences of harm were others' experiences. The only category for which reported first-hand experiences exceeds second-hand experiences is harm from drinking water. On average, 6.9 per cent of people reported personal experiences of harm from drinking water, while 6.6 per cent reported only knowing of others' experiences.

FIGURE 2.2

Average levels of harm experience and worry, by domains, 2021

Violent crime is the domain for which levels of worry most substantially exceed levels of both first-hand and overall experience of harm.



Source: World Risk Poll; IEP calculations

Note: Averages across 121 countries, unweighted by country populations. "All experience" refers to the sum of both first-hand and second-hand experience.

TABLE 2.1

Relationships between experience and worry, by domains, 2021

Five out of six domains in the SPI show a strong positive correlation between experiences of harm and worry about harm.

	Experience			Worry ("Very worried")	Worry levels in comparison to experience levels				Correlations		
	All experience (first-hand and second-hand)	First-hand experience	First-hand experience as a percentage of all experience		All experience (first-hand and second-hand)		First-hand experience		All experience and worry	First-hand experience and worry	Second-hand experience and worry
					Absolute (percentage point difference)	Relative (per cent difference)	Absolute (percentage point difference)	Relative (per cent difference)			
Food	18.8%	7.9%	42.0%	21.6%	+2.7pp	14.6%	+13.7pp	172.9%	0.67	0.67	0.53
Water	13.5%	6.9%	51.3%	20.0%	+6.5pp	48.5%	+13.1pp	189.6%	0.76	0.7	0.73
Violent Crime	20.9%	5.6%	26.9%	35.8%	+14.9pp	71.3%	+30.2pp	537.5%	0.77	0.6	0.77
Severe Weather	26.1%	11.1%	42.3%	35.3%	+9.2pp	35.2%	+24.3pp	219.3%	0.53	0.66	0.55
Mental Health	25.7%	7.8%	30.4%	23.7%	-2.1pp	-8.0%	+15.9pp	202.6%	0.34	0.23	0.334
Work	22.7%	10.3%	45.2%	10.4%	-12.3pp	-54.1%	+0.2pp	1.7%	0.69	0.58	0.37
All Domain Average	22.3%	8.4%	38.3%	25.2%	+2.9pp	+15.2%	+16.8pp	228.5%	0.61	0.55	0.61

Source: World Risk Poll; IEP calculations

Note: Correlations calculated based on rates across 121 countries. Food and Water are combined into a single domain in the average scores.

For most domains, levels of *worry* correlate strongly with levels of *experience*, with five out of the six categories showing correlation coefficients greater than 0.5. Only the *mental health* domain displays a relatively low level of correlation, with a coefficient of 0.34, and the correlation becomes even weaker ($r=0.23$) when looking exclusively at first-hand experiences. These low levels of correlation may arise in part from the fact that *mental health* harms can be more difficult to perceive or identify than the primarily physical harms of the other domains.

BOX 2.2

Absolute and relative relationships between worry and experience

Measuring differences between levels of worry and first-hand and second-hand experience with harm can be done in absolute and relative terms.

Throughout this section and others in the report, effort has been made to touch on both types of approaches, as each offers unique insights into the relationships within a population between levels of worry and experience. For example, in a given country, 20 per cent of the population might have experienced a given risk, while 30 per cent expressed worry about it. In this example, *worry* would be 10 percentage points higher than *experience* in absolute terms, but in relative terms it would be 50 per cent higher.

For personal experiences in particular, social and internalised stigmas may reduce the rates at which survey respondents recognise or report on their own *mental health* concerns.¹ While the *mental health* domain had the second lowest percentage of first-hand experiences of harm as a proportion of all known *experiences*, it had the highest absolute rate of knowledge of other people's experiences, with 17.9 per cent of people reporting second-hand experiences of *mental health* harm.

It is important to highlight that seemingly disproportionate levels of *worry* about certain types of risks relative to first-hand or second-hand *experiences* of harm do not necessarily equate to a miscalculation of risk. Worry arises not only as a result of how commonly a given harm occurs, but also based on its potential severity. As such, people's levels of *worry* may in part be based on sound assessments of the dangers posed by different types of risk. For example, a person might justifiably regard harm from *violent crime* as more threatening than those associated with workplace accidents, even if the latter were known to occur more frequently than the former.

Despite this, issues of uncertainty and lack of control also play a role in how risks are understood, and why they may be overestimated. Research on anxiety, for example, suggests that the uncontrollability of a situation feeds into feelings of uncertainty. Unpredictable and seemingly uncontrollable risks, therefore, may lead a person to engage in mental preparations

that are ineffective, taxing and psychologically demanding, resulting in what might be regarded as excessive levels of *worry*. In contrast, as levels of certainty about future events increase, perceived levels of control also increase. As such, even when a given occurrence is understood to be unavoidable, a person may be able to deploy adaptive anticipatory responses to mitigate its emotional or practical impact.²

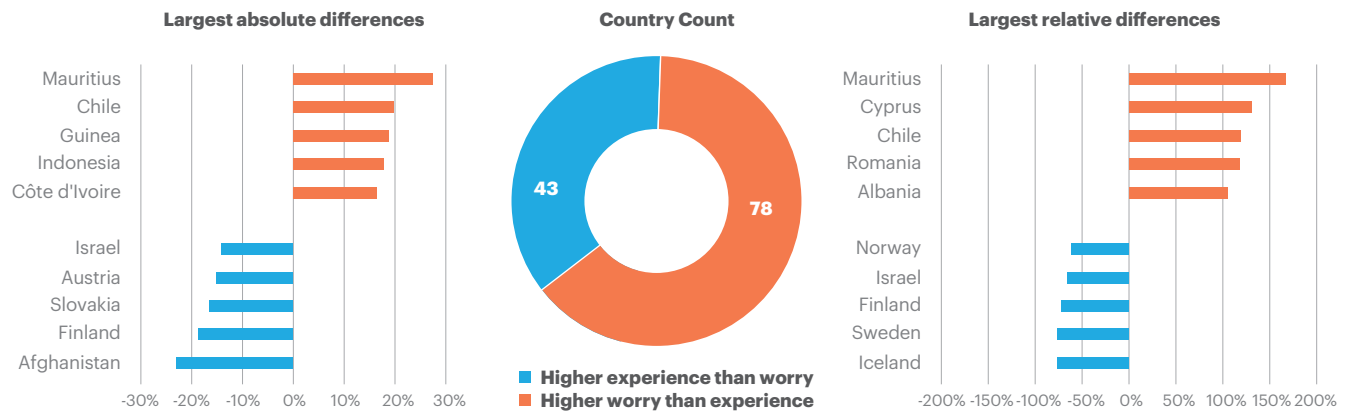
Such insights help explain the differing rates of *worry* relative to first-hand and second-hand *experiences* of harm across domains. For example, *violent crime* and severe weather events are likely to be associated with high levels of unpredictability and uncontrollability. It is therefore unsurprising that *worry* for these two domains tends to show the highest absolute levels of *worry* and the highest relative levels of *worry* in comparison to first-hand *experiences*.

Moreover, it is not simply from first-hand and second-hand experiences that people develop a sense of the threats that exist in their lives. Among other factors, the media and the news media in particular, play an important role in shaping safety perceptions. This explains why levels of *worry* related to *violent crime* and *severe weather*, which are heavily covered in the media, far outstrip levels of *experience*.

The news media has long been critiqued for giving outsized focus to comparatively rare occurrences, particularly *violent crime*, which serves to inflate perceptions of the danger of such threats.³ Recent analyses have demonstrated that this dynamic is particularly pronounced with social media. A study from Finland revealed that, while habitual consumers of traditional news media were five per cent more likely than non-consumers to report a fear of violent crime, those regularly consuming both traditional and social news media were ten per cent more likely to be fearful. Moreover, those consuming a combination of traditional, social and alternative information sources (the latter including disreputable or unreliable sources) were 16 per cent more likely to report fearfulness of violent crime.⁴ In contrast, other types of harm, such as those related to mental health and the workplace, tend to receive less media coverage, while also being associated with higher degrees of perceived controllability.⁵

FIGURE 2.3
Harm experience and worry differences, by country, 2021

In most countries, levels of worry about harm are higher than rates of experience with harm.



Source: World Risk Poll; IEP calculations

Note: Absolute difference refers to the raw discrepancy between two percentages, while relative difference refers to the proportional discrepancy between them. For example, if a country had an experience rate of 20 per cent and a worry rate of 30 per cent, worry would be 10 percentage points higher than experience in absolute terms, but it would be 50 per cent higher in relative terms.

Differences by countries and regions

In most countries, levels of *worry* regarding harm exceeds levels of *experience* of harm. Averaging rates across all domains, 78 countries have higher levels of *worry* than *experience*, while 43 countries have higher levels of *experience* than *worry*, as shown in Figure 2.3. Figure 2.3 also lists the countries with the largest discrepancies between overall levels of *worry* and *experience*, both in absolute and relative terms.

Mauritius has the highest absolute and relative difference between *experience* and *worry*, meaning that on average, respondents from Mauritius worry about harm far more than they experience it. With an average rate of *experience* of harm at 16.5 per cent, the country has the 35th lowest level of *experience* out of the 121 countries included in the SPI. However, its average *worry* rate of 44.1 per cent places it among the 10 countries with the highest *worry* rates in the world. Mauritius also had the second largest discrepancy between *worry* and *experience* in the 2019 survey, when its average *experience* of harm rate stood at 26 per cent and its average *worry* rate stood at 46.4 per cent.

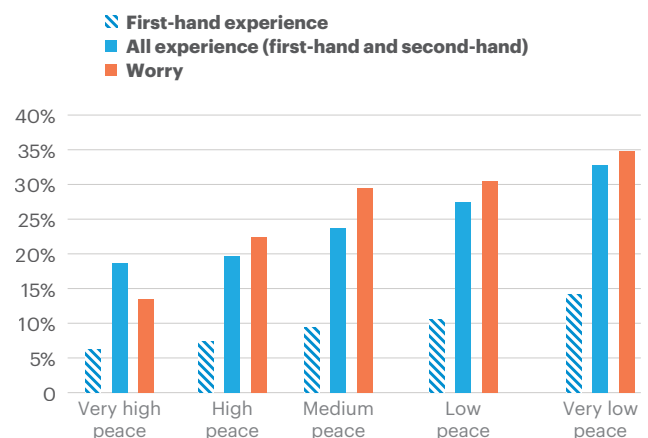
Mauritius’s high levels of *worry* about *violent crime* are particularly noteworthy, as Mauritius ranked as the most peaceful country in sub-Saharan Africa in the 2022 Global Peace Index (GPI). On this note, the country’s rates of overall *experience* and first-hand *experience* of *violent crime* are, respectively, less than half and less than one-tenth the global averages. Despite this, levels of *worry* about *violent crime* are nearly twice as high in Mauritius than on average globally. High-income countries tend to show higher overall levels of *experience* of harm, compared to their levels of *worry*, while middle-income and low-income countries have the opposite with higher levels of *worry* in comparison to *experience*. Sixty-nine per cent of the high-income countries surveyed show higher rates of *experience* than *worry*, compared to only 13.6 per cent of the middle-income countries and 44.4 per cent of the low-income countries.

Of the five countries where *experience* most exceeds *worry* in absolute terms, only Afghanistan is not a high-income country (Box 2.3). When comparing relative differences where *experience* exceeds *worry*, four of the five largest discrepancies are high-income Nordic countries. In contrast, the countries where *worry* most exceeds *experience* in either absolute or relative terms include a mix of high, middle and low-income countries.

As country income correlates strongly with national-level peacefulness, similar dynamics are observable in relation to peace-level groupings. Specifically, very high peace countries are the only grouping for which average levels of overall *experience* of harm exceed average levels of *worry*, as shown in Figure 2.4. Moreover, average rates of first-hand *experience* of harm, overall *experience* of harm, and *worry* all increase as peace levels decline.

FIGURE 2.4
Levels of harm experience and worry, by peace level groupings, 2021

Very high peace countries are the only grouping for which worry is lower than overall experience; for other peace levels, worry is higher than overall experience.



Source: World Risk Poll; IEP calculations

Note: Averages unweighted by country populations. “All experience” refers to the sum of both first-hand and second-hand experience.

This trend holds true across all domains, with the exception of *mental health*. For *mental health*, rates of first-hand and overall *experience* follow a U-shape, with the highest rates present in very high and very low peace countries and the lowest rates present in medium peace countries. This is likely in part the

result of comparatively greater public focus on *mental health* concerns in high-income and high-peace countries,⁶ which might result in survey respondents in such countries more readily identifying the impact of *mental health* concerns in themselves and others.

BOX 2.3

More experience of harm than worry – Afghanistan

In absolute terms, Afghanistan shows the lowest level of overall *worry* in comparison to *experience* of harm of any country, with its *worry* rate falling 22.8 percentage points lower than its *experience* rate. However, out of all countries in the SPI, Afghanistan reports the highest level of *experience* in *violent crime*, with a rate of 59.2 per cent. Afghanistan also ranks as the least peaceful country in the world in the 2022 Global Peace Index and the country most impacted by terrorism in the 2022 Global Terrorism Index.

In Afghanistan, the highest scoring domain for both *experience* and *worry* is *violent crime*, as shown in Figure 2.5. This is also the only domain where levels of *worry* are higher than levels of overall *experience*, although the difference is very small: 59.5 per cent for *worry* in comparison to 59.2 per cent for *experience*. In contrast, *worry* about *violent crime* substantially exceeds levels of *experience* with it in the majority of countries in the world.

As violence and terrorism shape daily routines across the country, Afghans may become desensitised to other risks and worry about other concerns less, which may explain why on average levels of reported experience of harm are higher than levels of worry.

Research has shown that nearly three decades of conflict have influenced perceptions of war and violence for Afghans. Routine events like going to

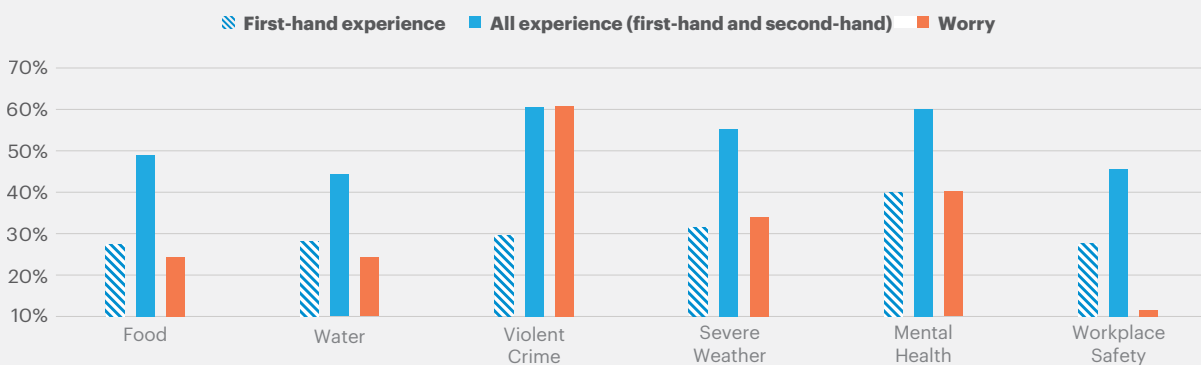
school and work, celebrating special occasions, and socialising occur alongside the daily threat and reality of severe conflict, which has caused many to normalise the prevalence of violence. The youngest generation of Afghans have very little experience of peace, which has shaped their coping mechanisms and perceptions.⁷ Out of all countries in the SPI, Afghanistan also reports the highest level of concern of harm from mental health, at 58.7 per cent.

Another key reason for the discrepancy between levels of *worry* and *experience* of harm may be that the top concern in the country is “war and terrorism”, which does not fit within the five SPI domains. More than 60 per cent of Afghans identified “war and terrorism” as the top threat to their everyday safety, more than double the next highest rate of 29.9 per cent in Burkina Faso. In 2021, there were only two countries where a single threat was identified as the top concern by more than half of the population. The second ranking concern in Afghanistan was economic concerns, like unemployment or high prices, at 22.9 per cent. As a result, just two issues were the top concerns for the overwhelming majority (85 per cent) of Afghans, and neither of these are fully captured in the five domains in the SPI. As such, it is not necessarily that Afghans exhibit less fear overall, but rather that their worries are primarily directed elsewhere – namely, to war, terrorism and economic hardship.

FIGURE 2.5

Afghanistan – levels of harm experience and worry by domains, 2021

While in most countries levels of worry about different harms tend to exceed levels of overall experience, in Afghanistan the opposite is the case.



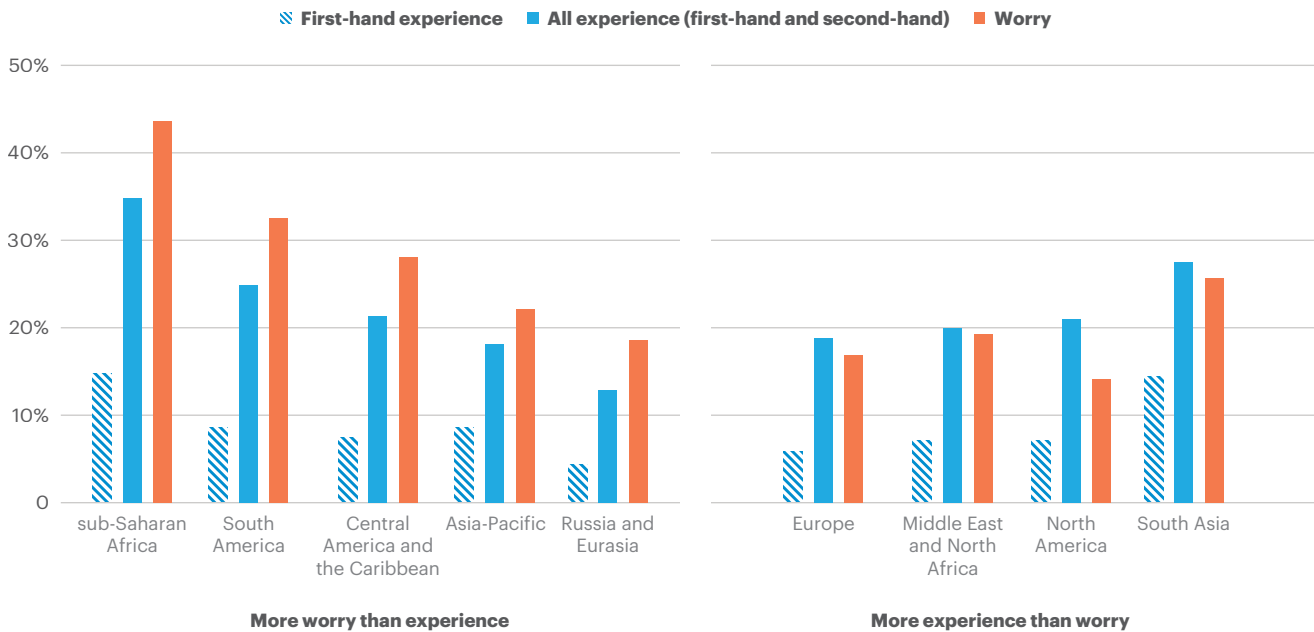
Source: World Risk Poll; IEP calculations

Note: “All experience” refers to the sum of both first-hand and second-hand experience.

FIGURE 2.6

Average levels of first-hand experience, overall experience and worry, by region, 2021

Five regions have higher levels of overall experience with harm than levels of worry, while four have higher levels of worry.



Source: World Risk Poll; IEP calculations

Note: Averages unweighted by country populations. "All experience" refers to the sum of both first-hand and second-hand experience.

As shown in Figure 2.6, five regions have higher levels of overall *experience* of harm than *worry*, while four have higher levels of *worry* than harm. Sub-Saharan Africa has the highest average levels of first-hand *experience* of harm, overall *experience* of harm, and *worry* out of all the regions, at 14.7 per cent, 35 per cent and 44 per cent, respectively.

The Russia and Eurasia region has the lowest level of first-hand *experience*, at 4.4 per cent, as well as overall *experience*, at 13 per cent, while North America has the lowest level of *worry*, at 14 per cent.

First-hand and second-hand experience of harm

Unsurprisingly, rates of reported first-hand experience of harm tend to be lower than reported second-hand experiences. Across domains, the rate of first-hand harm experience was on average 8.4 per cent, while the rate of second-hand harm experience was 13.9 per cent, a difference of 5.5 percentage points. In relative terms, this means that, across all domains, 65 per cent more people had only second-hand experiences of harm.

Figure 2.6 shows the difference between average rates of first-hand and second-hand *experience* of harm in absolute and relative terms by region. South America had the largest absolute difference of first-hand over second-hand experience of harm, with its second-hand rate being 8.4 percentage points higher than its first-hand rate. In relative terms, four regions had second-hand rates that were more than twice as high as their first-hand rates, with the Russia and Eurasia region's second-hand rate exceeding its first-hand rate by the largest factor.

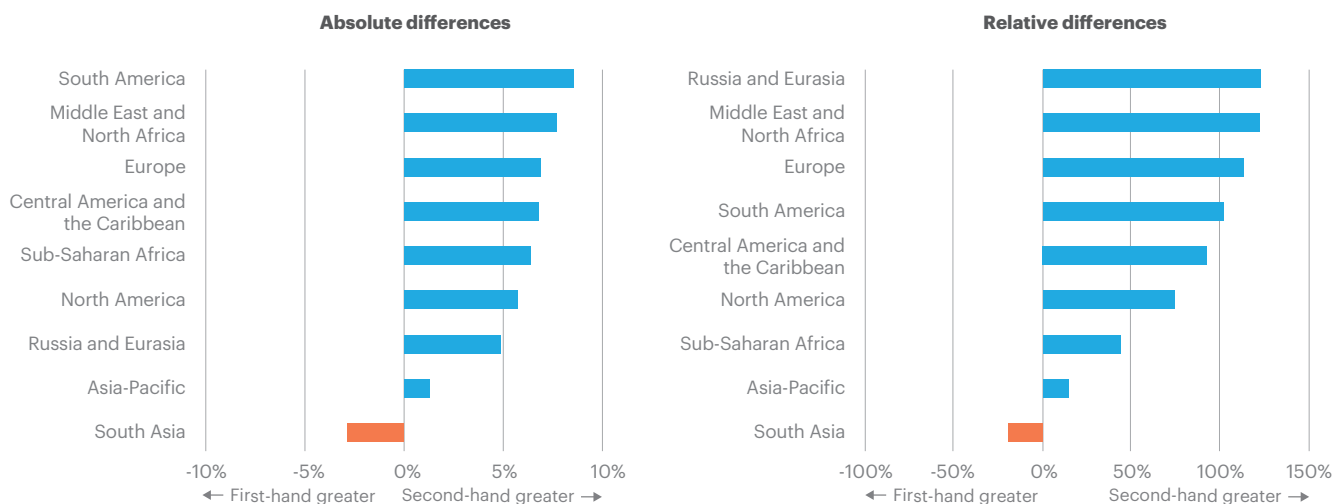
South Asia is the only region where, on average, reported first-

hand experience of harm exceeded second-hand experience. In absolute terms, second-hand experience exceeded first-hand experience by 2.9 percentage points. This unusual dynamic appears to be largely driven by the rates in India, where average first-hand harm experience outstripped second-hand experience by 19.6 percentage points, equivalent to a relative difference of 75.9 per cent, as shown in Figure 2.7.

FIGURE 2.7

Differences between levels of first- and second-hand experience of harm, by region, 2021

South Asia is the only region where reported first-hand experiences of harm exceeded reported second-hand experiences.



Source: World Risk Poll; IEP calculations

Note: Averages unweighted by country populations. Absolute difference refers to the raw discrepancy between two percentages, while relative difference refers to the proportional discrepancy between them. For example, if a country had an experience rate of 20 per cent and a worry rate of 30 per cent, worry would be 10 percentage points higher than experience in absolute terms, but it would be 50 per cent higher in relative terms.

While India had very high first-hand rates in comparison to its second-hand rates, this general trend was present across the region. Of the six surveyed countries in South Asia, two – India and Bangladesh – had higher first-hand than second-hand experience rates, while the remaining four countries had second-hand rates nearly on par with their first-hand rates. This trend was also largely present in neighbouring Southeast Asia, as reflected in Figure 2.8. In fact, of the ten countries with higher first-hand than second-hand harm experience rates, five were located in Southeast Asia.

It is not clear why people in South and Southeast Asia tended to report levels of first-hand harm that were either higher than or comparable to their experience of second-hand harm. It may be in part due to unobserved, cultural factors that could inform how people remember and report on their own experiences

as well as their memory of and inclination to report others' experiences.

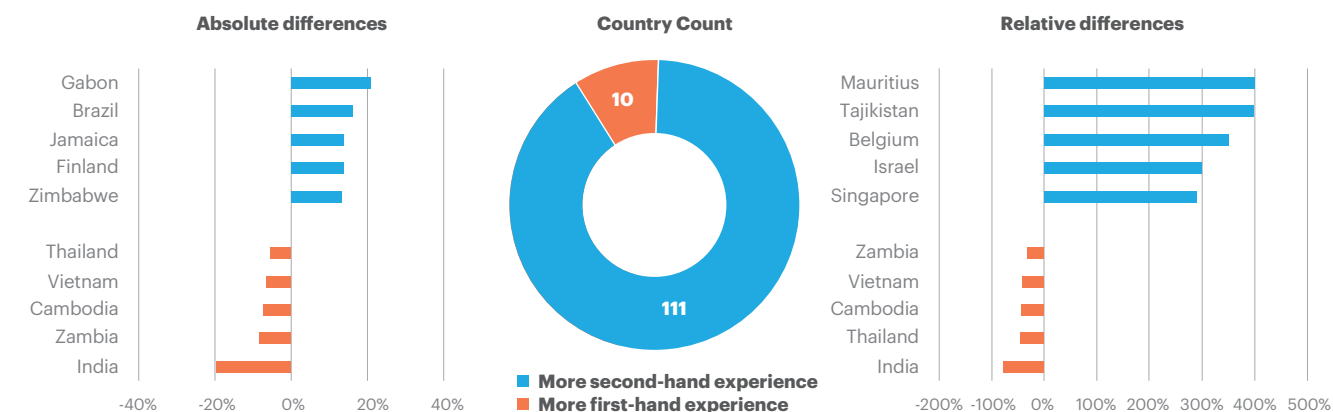
In addition, for all of the countries with higher average levels of first-hand experience, there were two domains and one sub-domain where this was most evident: *severe weather*, *workplace safety*, and *drinking water*. These are harm categories that especially afflict countries in South and Southeast Asia.

Figure 2.8 shows the countries where second-hand experience of harm is reported as being higher than first-hand experience of harm. In absolute terms, Gabon had the largest difference between first and second-hand experience of harm, with its average second-hand rate being 20.9 percentage points higher than its average first-hand rate. In relative terms, Mauritius experienced the highest level of second-hand harm over first-hand harm, being 401 per cent higher.

FIGURE 2.8

Differences between first- and second-hand harm, by country, 2021

In the vast majority of countries, rates of second-hand experience of harm were higher than first-hand rates.



Source: World Risk Poll; IEP calculations

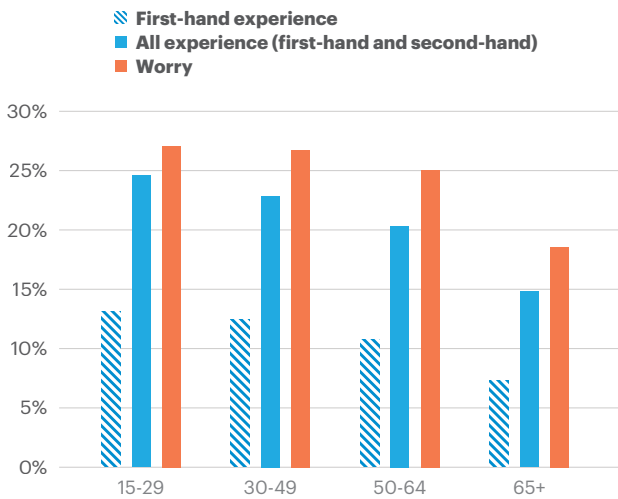
Note: Absolute difference refers to the raw discrepancy between two percentages, while relative difference refers to the proportional discrepancy between them. For example, if a country had an experience rate of 20 per cent and a worry rate of 30 per cent, worry would be 10 percentage points higher than experience in absolute terms, but it would be 50 per cent higher in relative terms.

Differences by age and sex

Average levels of first-hand experience of harm, overall *experience* of harm, and *worry* steadily decline with age. Respondents aged 15-29 reported the highest levels of recent *experience* of harm as well as *worry*, while those aged 65 and older reported the lowest, as shown in Figure 2.9. This finding aligns with correlational and longitudinal studies in multiple countries that have consistently shown that older adults report better wellbeing and fewer negative emotions – including *worry* – than younger adults. Older adults tend to more proactively employ coping responses to minor hassles or stressful events, perceiving them as less unpleasant while also scoring lower on measures of anxiety and depression. Researchers have posited that this may arise out of a desire to maximise their wellbeing in the limited time they believe they have left.⁸

FIGURE 2.9
Levels of harm experience and worry, by age, 2021

Both experience of harm and worry tend to decline with age.



Source: World Risk Poll; IEP calculations
Note: “All experience” refers to the sum of both first-hand and second-hand experience.

However, older people actually tend to exhibit higher levels of *worry* relative to their *experience* of recent harm. For example, people aged 65 and older had the lowest absolute levels of *worry* about harm of any age group, but relative to their levels of harm *experience*, they had the highest. This may in part be because certain problems become more critical in old age.⁹ The average rates of *worry* for respondents aged 65 and older were 3.7 percentage points higher than their rates of *experience*. In contrast, the average rates of *worry* of people aged 15 to 29 were 2.4 percentage points higher.

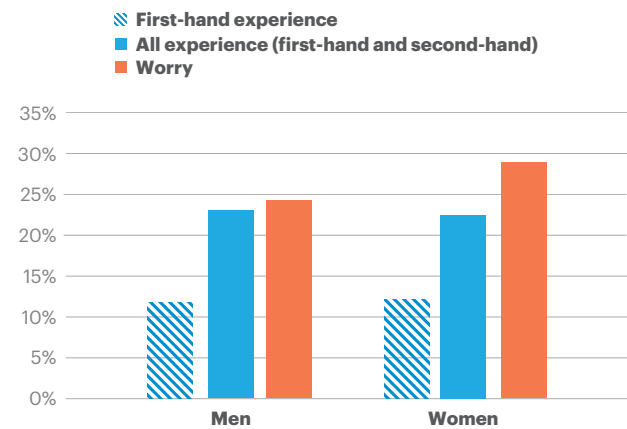
This dynamic holds true across three out of the five domains. As age increases, levels of *worry* become proportionally greater than recent *experiences* of harm in relation to *food and water*, *violent crime*, and *workplace safety*, while they decline in relation to the *severe weather* and *mental health* domains. Relative to their levels of recent *experience* of harm, older people tend to display particularly high rates of *worry* with regard to *violent crime*. People aged 65 or older had average rates of worry about *violent crime* that were more than twice their average rates of recent *experience*, by far the largest discrepancy of any

risk domain and age cohort. In contrast, with regard to *mental health*, respondents aged 65 and older were the only group to register lower levels of *worry* than levels of overall *experience*. Older adults reported a combination of first-hand and second-hand *experience* of *mental health* concerns at a rate of 21.5 per cent, but their rate of *worry* was only 16.4 per cent.

In addition to age, levels of *worry* and *experience* of harm are also affected by the sex of respondents. On average, men reported minutely higher rates of first-hand and overall *experience* of harm, while women reported notably higher rates of *worry*, as shown in Figure 2.10. Men’s levels of overall *experience* were 0.9 percentage points higher than women’s and their rates of first-hand experience were just 0.2 percentage points higher. In contrast, women’s levels of *worry* were 4.6 percentage points higher than men’s. Despite this, both men and women had higher levels of *worry* than overall *experience* of harm.

FIGURE 2.10
Harm experience and worry levels, by sex, 2021

While rates of average harm experience were almost on par for men and women, women had notably higher rates of worry.



Source: World Risk Poll; IEP calculations
Note: “All experience” refers to the sum of both first-hand and second-hand experience.

Looking across domains, men’s and women’s rates of first-hand and overall *experience* were similar for most domains. Women reported slightly higher rates of harm from *mental health* concerns as well as *food and water*, while men reported slightly higher rates from *violent crime* and *severe weather*. The only domain for which one sex had notably higher rates of *experience* of harm was *workplace safety*, with 16.2 per cent of men experiencing workplace harm first-hand and 26.7 per cent experiencing it overall, compared to 13.5 per cent of women experiencing it first-hand and 22.3 per cent experiencing it overall. In relative terms, this means that men were approximately 20 per cent more likely to be harmed at work than women.

In light of this, it is unsurprising that the only domain for which men exhibited higher levels of average *worry* than women was *workplace safety*, with 20 per cent of men worrying about it compared to 19 per cent of women. However, relative to their levels of *experience* of harm for *workplace safety* men exhibited lower levels of *worry* than women. Indeed, this held true across all domains.

The most pronounced difference between men and women was in relation to *violent crime*, where 86.4 per cent more women worried than had a recent first-hand or second-hand experience. In contrast, only 38.3 per cent more men worried about violent crime than experienced it. For first-hand experience only, 11.9 per cent of women reported a recent experience of violent crime, compared to 12.1 per cent of men. This finding aligns with other research on the relationship between gender and fear of certain offenses and crimes, which has shown that women almost always report a higher level of fear than men. Women's worry of violent crime is partly influenced by the perceived heightened severity of gender-based physical and sexual violence, and its prevalence both in the home and in public spaces.¹¹

For the *mental health* domain, the differences by sex were also pronounced, with men's rates of *worry* being lower than their rates of *experience*, while women's rates of *worry* were higher than their rates of *experience*. This was the case despite men's and women's rates of *experience* of mental health concerns being roughly the same: 25.8 per cent for women and 24.2 per cent for men. The diverging rates of worry between men and women may in part be the result of different attitudes and approaches to mental health concerns.¹²

3 | Employment and Perceptions of Safety and Wellbeing

Studies over several decades have found a clear association between gainful employment and better social and health outcomes, including its effects on subjective feelings of wellbeing.¹ However, less attention has been directed to the related issue of people’s perceptions of safety, including perceptions of social and economic security, and how these relate to employment status. Using the World Risk Poll data, this section examines the interrelations between employment, perceptions of safety, and perceptions of wellbeing.

This analysis reflects on the conditions created by the COVID-19 pandemic, which has had a significant impact on employment dynamics globally. The pandemic brought about major shifts in how people work and how they view work, altering employees’ expectations and making working from home much more common.² COVID-19 also impacted working hours, and job losses between 2019 and 2020 were estimated to reach 114 million, an unprecedented figure.³ In light of these changes, data from the 2019 and 2021 World Risk Poll and the associated Gallup surveys offer insight into how people’s relationships with work have changed since the onset of the pandemic and how these changes correlate with other shifts in feelings of risk and subjective measures of economic, social and personal wellbeing.

The nature of employment and the risks posed by changes in employment status vary from country to country and also by socio-economic groupings. Therefore this section also examines the state of employment and feelings of safety and wellbeing by country and region, sex and age, to better understand the dynamics of the changing working environment and how it affects personal safety.

Although worries related to employment and quality of life increased for all employment groups, the World Risk Poll data shows that the impact of the pandemic has been asymmetric, with the most vulnerable countries and segments of the workforce hardest hit.

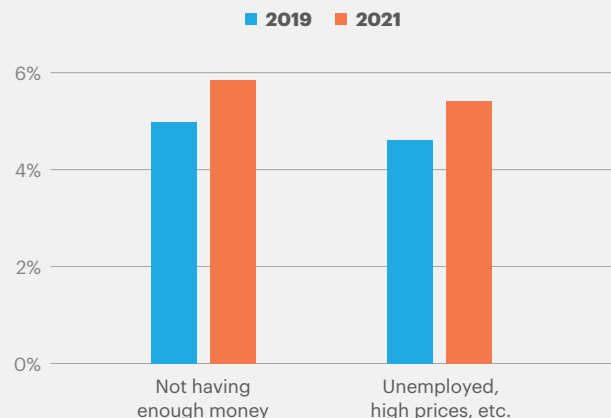
Respondents’ economic and financial worries rose notably between 2019 and 2021. As shown in Figure 3.1, the percentage of people identifying such concerns as their greatest safety threat in their everyday lives increased over the two years. The proportion of people globally citing financial issues, such as not having enough money to meet one’s needs, rose from five per cent in 2019 to 5.9 per cent in 2021. Similarly, the proportion of people citing economic issues, such as unemployment and high prices, rose from 4.5 per cent in 2019 to 5.3 per cent in 2021, an increase of 15 per cent.

At the global level there was a notable overall increase in the identification of economic issues like unemployment

as the top risk in daily life. However, the rates increased in exactly half of the countries surveyed and decreased in the other half, as shown in Figure 3.2. The reason that the net global rate rose overall was because the country increases were higher than country decreases.

FIGURE 3.1
Financial difficulties and economic issues as top risks to daily life, 2019–2021

Between 2019 and 2021, there was a rise in the number of people identifying financial and economic issues as top risks in their daily lives.



Source: World Risk Poll; IEP calculations

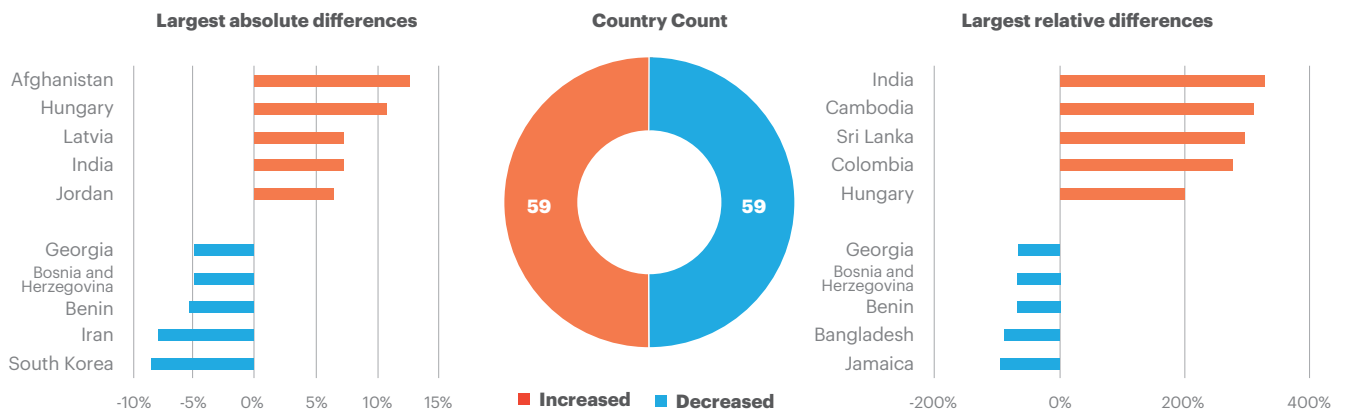
In absolute terms, the largest increase in *worry* occurred in Afghanistan and the largest decrease occurred in South Korea; while in relative terms, the largest increase occurred in India and the largest decrease occurred in Jamaica.

Rising concerns about money and unemployment are likely to be a direct result of the global economic downturn associated with the pandemic. The slowing of economic activity caused by reductions in local mobility, international movement of people and goods, and a variety of other disruptions led to broad-based losses across global income groups. However, the slowdown was most keenly felt by the world’s poor. The number of those living in extreme poverty is estimated to have risen by 131 million in 2020, while the global middle class is estimated to have shrunk by 54 million people in 2020.⁴ The World

FIGURE 3.2

Biggest changes in unemployment as a top risk, 2019–2021

Exactly half of all countries saw an increase in economic concerns ranking as the top risk in daily life, but these increases were much larger than the decreases in the other countries.



Source: World Risk Poll; IEP calculations

Note: Absolute difference refers to the raw discrepancy between two percentages, while relative difference refers to the proportional discrepancy between them. For example, if a country had an experience rate of 20 per cent and a worry rate of 30 per cent, worry would be 10 percentage points higher than experience in absolute terms, but it would be 50 per cent higher in relative terms.

Bank highlights how global poverty was consistently in decline prior to 2020 and that the onset of the pandemic reversed many of the gains of the previous few years. It found that people in the global middle-income and upper-income brackets were also significantly impacted by the downturn, estimating their 2020 income losses at between 4.9 and 5.7 per cent.

However, even as the global economy began to recover in 2021, the rebound was not felt equally by all, with low-income people continuing to be the most affected. In 2021, the average incomes of people in the bottom 40 per cent of the global income distribution were 6.7 per cent lower than pre-pandemic projections, while those of people in the top 40 per cent were down only 2.8 per cent.⁵

Economic disruptions of this kind appear to have contributed to

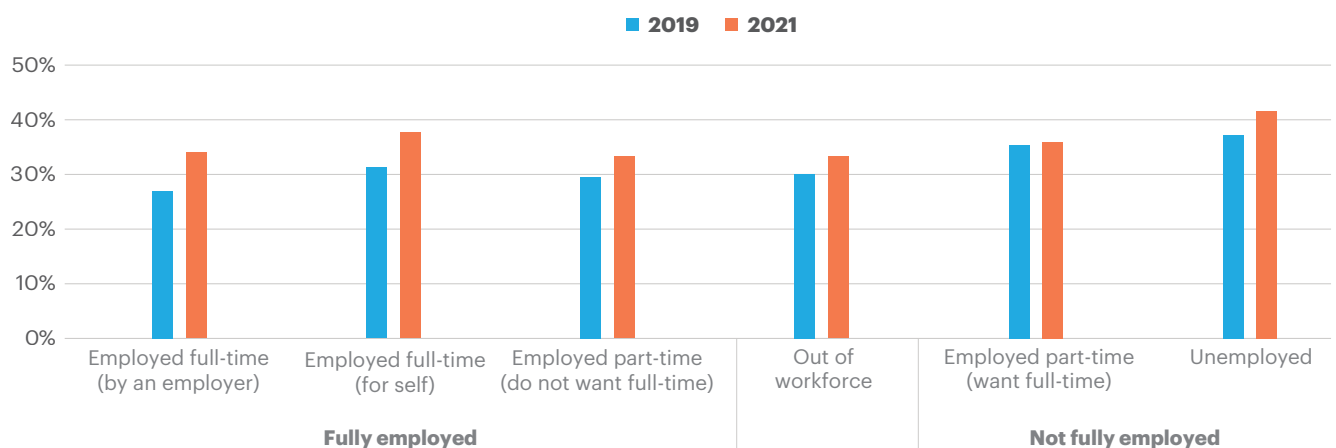
widespread reductions in feelings of safety. As seen in Section 1, the proportion of people globally that said they felt less safe than five years prior rose between 2019 and 2021. As shown in Figure 3.3, this trend held true for all employment groups. The six employment statuses in the figure are drawn from Gallup data and have been grouped here – and throughout this section – into three categories:

- **Fully employed** includes people employed full-time by an employer, people employed full-time for themselves, and people employed part-time but who do not wish to work full-time.
- **Out of the workforce** includes people who are retired, in education, engaged in unpaid domestic work, or otherwise not engaged or wanting to be engaged in remunerated work.
- **Not fully employed** includes people who are unemployed as well as those that are underemployed, which here refers to those working part-time but wishing to work full-time.

FIGURE 3.3

Percentage of people feeling less safe than five years ago, by employment status, 2019–2021

Feelings of unsafety increased for all employment groups.



Source: World Risk Poll; IEP calculations

While feelings of declining safety rose independent of employment status, the levels of change were not equal across groups. In both years, the unemployed had the highest rates of people feeling less safe, with 36.9 per cent feeling less safe in 2019 and 40.8 per cent feeling less safe in 2021, representing a 10.5 per cent increase over the two years. Moreover, those in the underemployed group had the smallest increase in rates of feeling less safe.

Strikingly, it was those who were employed full-time who had the largest increase in feeling less safe. Between 2019 and 2021, for those employed full-time by an employer, the rate of feeling less safe rose from 27.5 to 33.6 per cent – a 22 per cent increase. Similarly, for those employed full-time for themselves, the rate of feeling less safe rose from 30.4 to 38 per cent – a 7.6 percentage point jump, or 25 per cent increase.

Changes in employment

According to the International Labour Organisation (ILO), the global employment rate was 57-59 per cent between 2010 and 2019. With the onset of the pandemic, however, the rate dropped by 2.5 percentage points in a single year, to 54.8 per cent in 2020, followed by a modest rebound of 0.6 percentage points in 2021. During the same period, the changes in the unemployment rate were even more significant.⁶

As shown in Figure 3.4, between 2010 and 2019, the global unemployment rate gradually declined from 5.9 to 5.4 per cent. In 2020, however, it departed dramatically from that trend, jumping 1.2 percentage points or 22 per cent to 6.6 per cent. This equated to approximately 37.8 million more unemployed people globally. In 2021, global unemployment figures experienced a partial recovery, though the rate remained 0.8 percentage points higher than in 2019.

Not all groups were impacted equally by these shifts in employment and unemployment patterns. Table 3.1 summarises

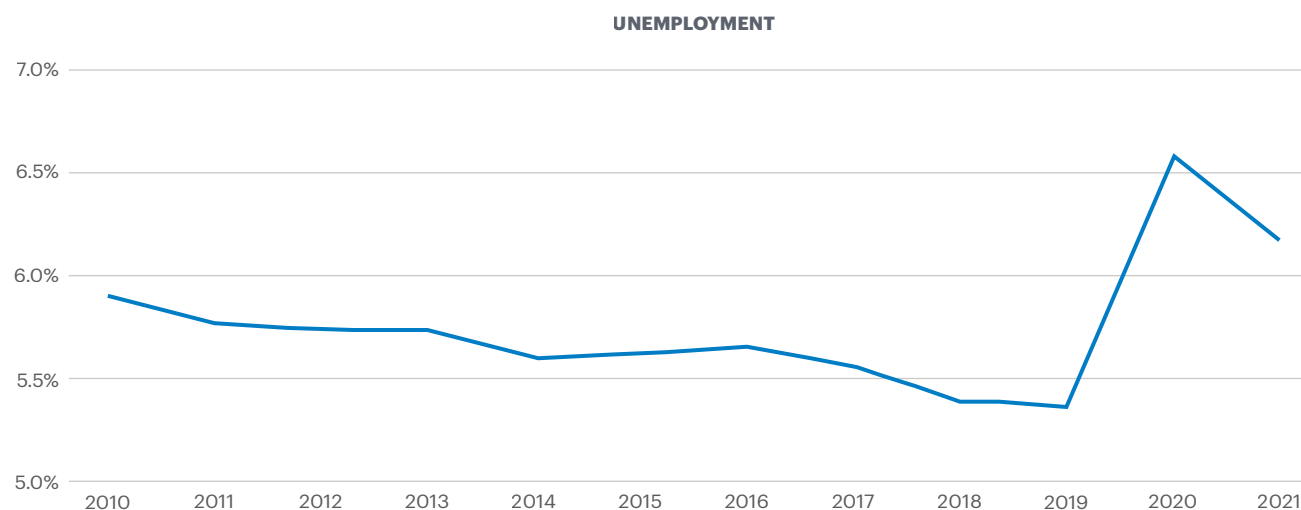
how employment and unemployment rates changed between 2019 and 2021 globally, for specific demographic categories (men, women and youth), and for country-income groups. In the case of employment rates, the demographic group most significantly impacted was youth, who experienced the largest relative drop in their employment rate in 2020. Despite a sizable rebound in 2021, the youth employment rate continued to lag the farthest behind 2019 levels. Among country-income groups, lower-middle-income countries recorded the largest relative decline in employment rates. Similar to youth, these countries' recoveries continued to be the farthest behind compared to 2019, even though a notable uptick occurred in 2021.

With regard to unemployment rates, men were the demographic category most significantly impacted by the downturn in 2020, as their levels of unemployment experienced a relative increase of 24.5 per cent. However, in 2021, men also experienced the largest rebound among demographic groups, meaning that, across the entire period, youth were once again the most impacted. Youth were the only demographic group whose unemployment rate continued to deteriorate in 2021. Similarly, high-income countries were the country-income grouping that experienced the largest relative increase in unemployment rates in the first year of the pandemic, but a rebound in 2021 halved the drop in rate. In contrast, the unemployment rates in low-income countries were among the least affected by the pandemic in its first year, but these countries were the only ones to continue to experience increases in unemployment into the following year. As a result, low-income countries had the largest overall increase in unemployment rates between 2019-2021.

The pandemic also had distinctive and multifaceted impacts on female workers. Women experienced larger declines in employment rates than men but smaller increases in unemployment rates, suggesting that women were more likely to leave the labour force altogether in 2020 and 2021. Research has found this to be the case, for instance, with regard to self-employed married mothers, who were more likely than men to leave the labour force to care for children.⁸ Such decisions

FIGURE 3.4
Unemployment rate, 2010–2021

The global unemployment rate spiked in 2020 as a result of the COVID-19 pandemic.



Source: World Bank

TABLE 3.1

Changes in employment and unemployment rates, by demographic and income-level groups, 2019–2021

Youth were the demographic group most impacted by employment and unemployment rates changes.

		Rate			Relative Change			
		2019	2020	2021	2019–2020	2020–2021	2019–2021	
Employment	Global	57.3%	54.8%	55.4%	-4.4%	1.1%	-3.3%	
	Demographic group	Men	69.4%	66.6%	67.3%	-4.0%	1.1%	-3.0%
		Women	45.2%	43.0%	43.4%	-4.9%	0.9%	-4.0%
		Youth (aged 15-24)	35.7%	32.7%	33.6%	-8.4%	2.8%	-5.9%
	Country-income group	Low income	64.0%	61.7%	61.9%	-3.6%	0.3%	-3.3%
		Lower-middle income	52.0%	49.0%	49.9%	-5.8%	1.8%	-4.0%
		Upper-middle income	61.6%	59.3%	59.7%	-3.7%	0.7%	-3.1%
		High income	58.1%	56.3%	56.9%	-3.1%	1.1%	-2.1%
Unemployment	Global	5.4%	6.6%	6.2%	22.2%	-6.1%	14.8%	
	Demographic group	Men	5.3%	6.6%	6.1%	24.5%	-7.6%	15.1%
		Women	5.5%	6.4%	6.3%	16.4%	-1.6%	14.5%
		Youth (aged 15-24)	13.5%	15.2%	15.6%	12.6%	2.6%	15.6%
	Country-income group	Low income	4.9%	5.6%	5.9%	14.3%	5.4%	20.4%
		Lower-middle income	5.1%	6.6%	5.9%	29.4%	-10.6%	15.7%
		Upper-middle income	6.0%	6.7%	6.7%	11.7%	0%	11.7%
		High income	4.8%	6.5%	5.6%	35.4%	-13.8%	16.7%

Source: International Labour Organisation; IEP calculations

may have also been motivated by income losses among the self-employed, who have been shown – both women and men – to have seen greater losses during the pandemic than those employed by employers.⁹

In addition to these quantitative measures of change, the pandemic also brought on a variety of qualitative shifts in workers' relationships with employment. For example, there have been a variety of overlapping trends related to changing levels of commitment to work. In many Western countries, much attention has been paid to the "Great Resignation" phenomenon. This refers to the unprecedented rise in the number of workers resigning from their jobs following the onset of the pandemic,¹⁰ mostly employees between 30 and 45 years old.¹¹ There has also been a growing trend of "work-to-rule" behaviours in many

countries, in which employees do the minimum required by their job. In the United States, for example, the idea of "quiet quitting" rose to prominence in 2022, while in China, the "lying flat" movement emerged in 2021 in reaction to widespread pressures to overwork in pursuit of higher pay and social status.¹²

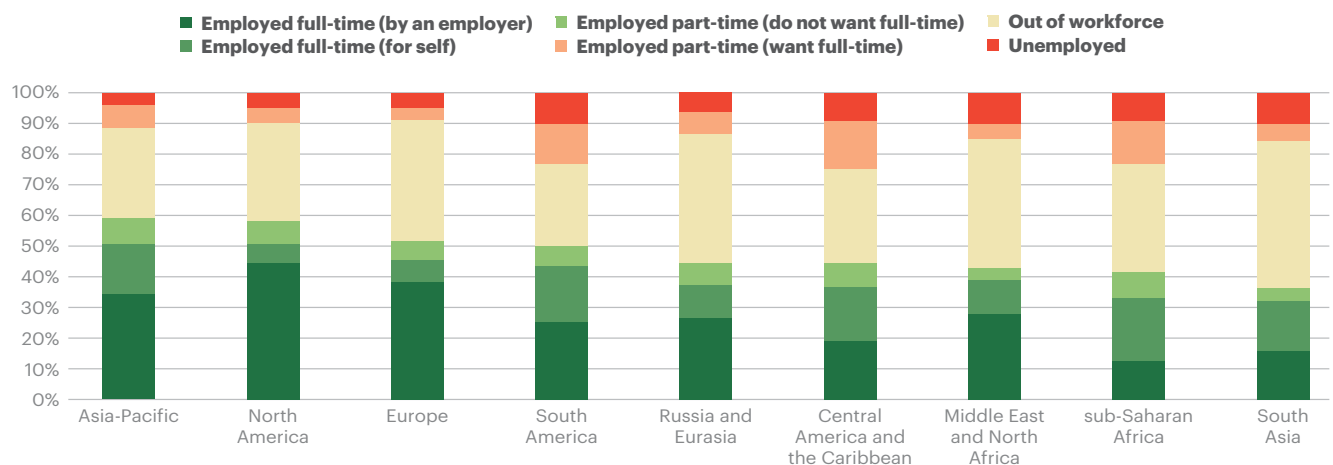
Employment statuses by region and peace levels

Drawing on complementary data from the Gallup World Poll, Figure 3.5 provides a breakdown of employment statuses in 2021 by regional averages. The highest average rates of employment by an employer in 2021 were in North America (44.3 per cent)

FIGURE 3.5

Employment types, by region, 2021

The Asia-Pacific region had the highest proportion of the adult population that was fully employed, while South Asia had the lowest.



Source: Gallup; IEP calculations

Note: Averages unweighted by country populations. Does not include China as information on employment status was not collected there in 2021.

and Europe (38.9 per cent), while the lowest were in sub-Saharan Africa (12.6 per cent) and South Asia (16.3 per cent). While sub-Saharan Africa had the second lowest total rate of full employment, it had the highest rate of self-employment of any region. Self-employed people make about a third of low-income and middle-income countries' economic activity.¹³ According to the ILO statistics, they account for 81.1 per cent of the total workforce in low-income countries and 63.7 per cent in lower-middle-income countries, compared to 39.4 per cent in upper-middle-income countries and only 12.1 per cent in high-income countries.¹⁴

The majority of these self-employed people in middle-income and low-income countries work in the informal economy, meaning that their economic activities are not regulated or protected by the state. As of 2018, 85.8 per cent of employment in Africa was informal, compared to 68.2 per cent in Asia and the Pacific, 68.6 per cent in the Arab States, 40 per cent in the Americas, and 25.1 per cent in Europe and Central Asia.¹⁵ Rural informal work, which tends to be overwhelmingly agricultural, was generally less affected by the economic downturns associated with COVID-19 compared to work in the urban informal sector. Often consisting of direct and indirect employment in the manufacturing and service sectors, the urban informal economy witnessed severe job losses related to the pandemic.¹⁶

Gallup survey data between 2019 and 2021 also suggests that there were increases in levels of underemployment in all regions; with South America, Central America and the Caribbean, sub-Saharan Africa and South Asia experiencing the largest increases. This can be attributed to an unprecedented loss in working hours due to the pandemic. In 2020, 8.8 per cent of global working hours were lost relative to the fourth quarter of 2019, equivalent to nearly 255 million full-time jobs.¹⁷

These global disruptions in loss of working hours were most pronounced in the second quarter of 2020 and were

accompanied by declines in people's incomes. By the end of 2020, the situation started to improve as many people switched to working from home. The lowest levels of full employment were in South Asia and sub-Saharan Africa, followed by the Middle East and North Africa. Between 2019 and 2021, the Middle East and North Africa and sub-Saharan Africa recorded the largest drops in average per capita income, by 9.6 and 7.2 per cent, respectively.¹⁸

Previous research has found that levels of employment within a country tend to correlate with higher levels of peace. Higher employment levels reduce the likelihood of conflict, allowing for further investment into the economy, thereby increasing stability and creating more jobs.¹⁹ In contrast, national crises and low levels of peace can severely halt and even reverse economic development, leading to limited availability and decreased quality of jobs.²⁰ Based on Gallup data, Figure 3.6 provides the breakdown of employment statuses by peace levels.

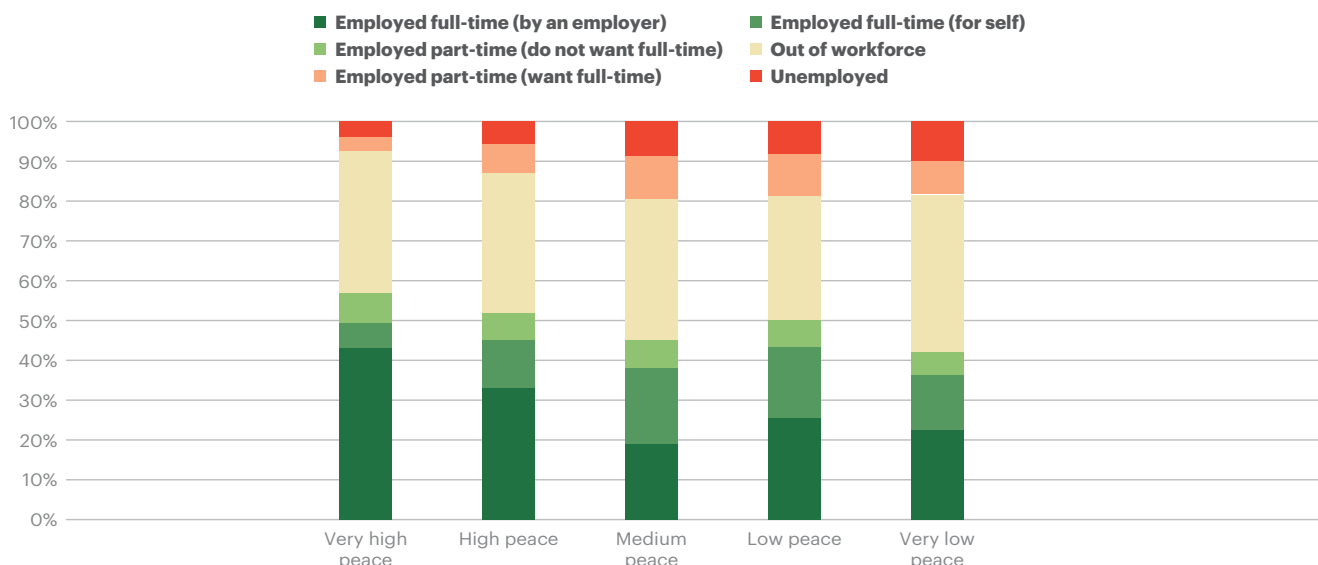
Levels of full employment have a positive relationship with levels of peace. Moreover, being employed by an employer also tends to be more common in higher peace countries than in lower peace countries. In contrast, medium, low and very low peace countries reported higher levels of both self-employment and underemployment; which may be attributed to a lack of other job opportunities, a limited business sector, and the lack of larger international companies. For many workers who are underemployed or self-employed out of necessity rather than choice; their employment terms of compensation, available hours of work, and skill level are lower.²¹

Quality of life measures and employment status

Job satisfaction has been shown to be associated with life satisfaction,²² with studies finding an average correlation

FIGURE 3.6
Employment statuses, by peace levels, 2021

Very high peace countries have the highest rates of full employment, while very low peace countries have the lowest.

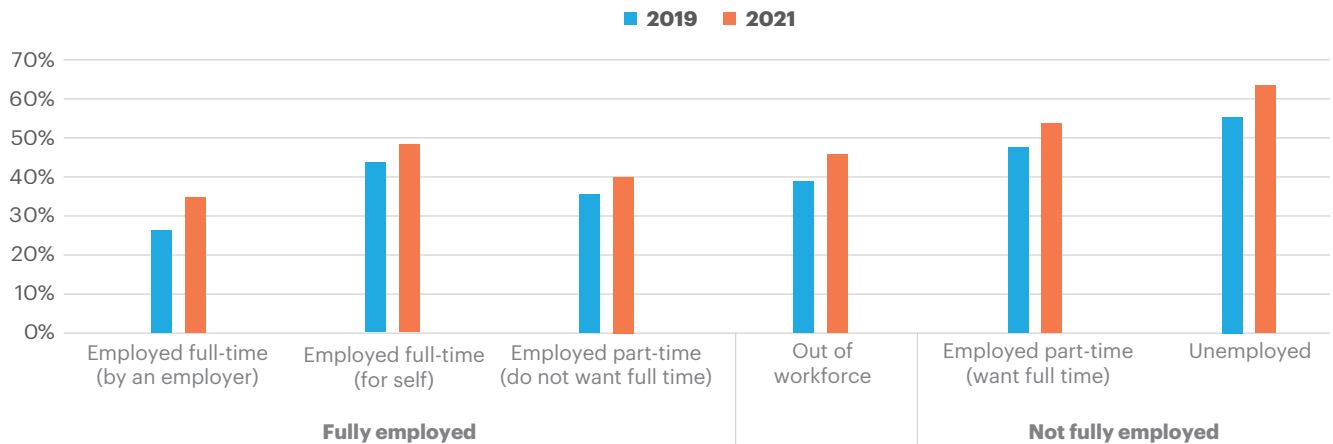


Source: Gallup; IEP calculations
Note: Averages unweighted by country populations.

FIGURE 3.7

Percentage of people struggling on present income, by employment status, 2019–2021

All employment groups reported an increase in struggling on present income.



Source: World Risk Poll; IEP calculations

coefficient of 0.44.²³ Some studies posit that employment status influences wellbeing, while others claim that it is wellbeing that has a causal effect on a person's ability to obtain employment.²⁴ Regardless of these positions, there is a general consensus that a positive relationship exists between employment and perceptions of quality of life.²⁵ In contrast, unemployment can negatively influence long-term levels of subjective wellbeing.²⁶

Figure 3.7 depicts the rates at which respondents of different employment statuses reported struggling to get by on their current incomes. For all groups, the rates increased between 2019 and 2021. Unemployed people struggled the most in both years, with 54.9 per cent in 2019 and 63.3 per cent in 2021. Underemployed respondents had the second highest rate of struggling to get by on their present income in both years.

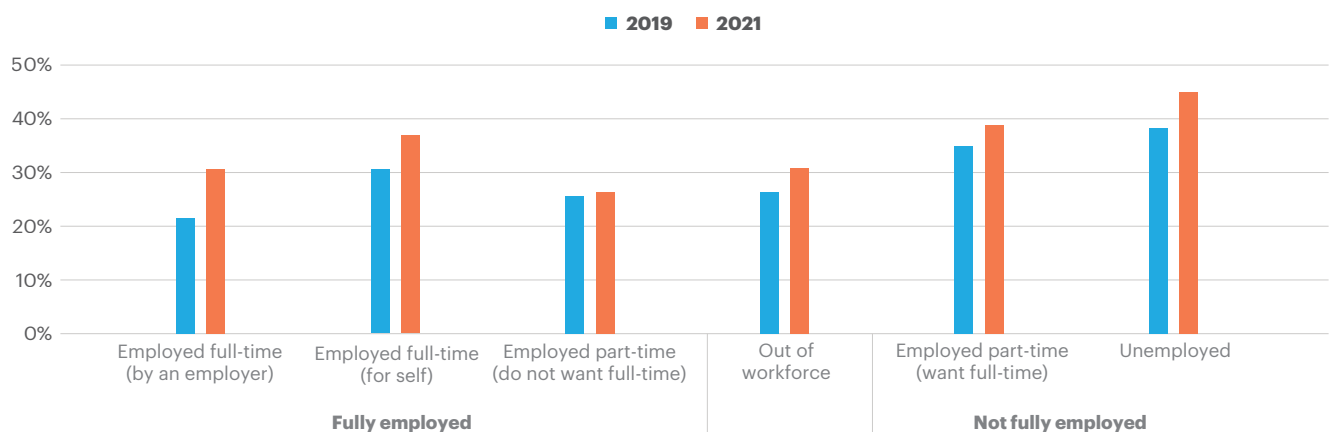
Although respondents employed full-time by an employer reported struggling on their current income at the lowest rates in both years, this category recorded the highest relative increase in rates, with 24.8 per cent more people in this group struggling to get by in 2021 than did in 2019. Globally, an increase in people who struggle on their income while employed full-time by an employer could be in part attributed to the economic repercussions of COVID-19 on low-wage workers. This group was hit hard by early lockdown measures and supply chain disruptions which caused a spike in consumer food prices and inflation.²⁷

The Gallup data also revealed an increase in dissatisfaction with current living standards for all employment groups (Figure 3.8). Strikingly, people employed full-time by an employer experienced the largest absolute and relative increase in

FIGURE 3.8

Percentage of people dissatisfied with their current living conditions, by employment status, 2019–2021

Feeling of dissatisfaction with current living conditions increased for all employment groups.



Source: World Risk Poll; IEP calculations

dissatisfaction with life, jumping from a rate of 21.6 per cent in 2019 to 30.7 per cent in 2021. In contrast, those employed part-time and not wishing for full-time employment saw the smallest increase, with their rate rising by just one point from 25.6 to 26.6 per cent. In both years, people who were not fully employed had the highest overall levels of dissatisfaction, with 44.3 per cent of unemployed people reporting dissatisfaction in 2021, followed by 38.7 per cent of underemployed people.

In the context of more people experiencing financial hardships, Figure 3.9 depicts the percentages at which different employment groups rated their lives negatively in 2019 and 2021. As can be seen, four out of the six employment categories experienced increases in respondents rating their lives negatively, while the other two saw declines. By far the highest increase occurred among people out of the workforce, whose rate increased by 12.9 percentage points. This group includes retired adults and students, two groups especially impacted by the pandemic. In particular, older and retired people experienced heightened loneliness and social isolation exacerbated by the pandemic. Similarly, closures of schools and academic institutions isolated students from social life, with estimates that more than 94 per cent of the world’s student population was impacted.²⁹

The second largest increase was recorded for people employed full-time by an employer, whose rate of regarding their lives negatively rose by 3.6 percentage points. The pandemic has posed a considerable challenge to peoples’ work situations and lifestyles, which could in part be a reason for increased life dissatisfaction among people employed full-time by an employer. Work overload, occupational discomfort and employment uncertainty have been shown to impact job performance.³⁰ In contrast, the proportion of people employed part-time and not wanting full-time employment recorded the largest decline, as their rate fell by 6.4 percentage points. There are varying levels of correlation between feelings of financial insecurity, negative perceptions about one’s life conditions, and the state of being unemployed or underemployed. Table 3.2 summarises these correlations on the basis of the national rates of each across all surveyed countries in 2021.

TABLE 3.2
Correlations between different measures on quality of life and the percentage of people not fully employed, 2021

Five out of six domains in the SPI show a strong positive correlation between experiences of harm and worry about harm.

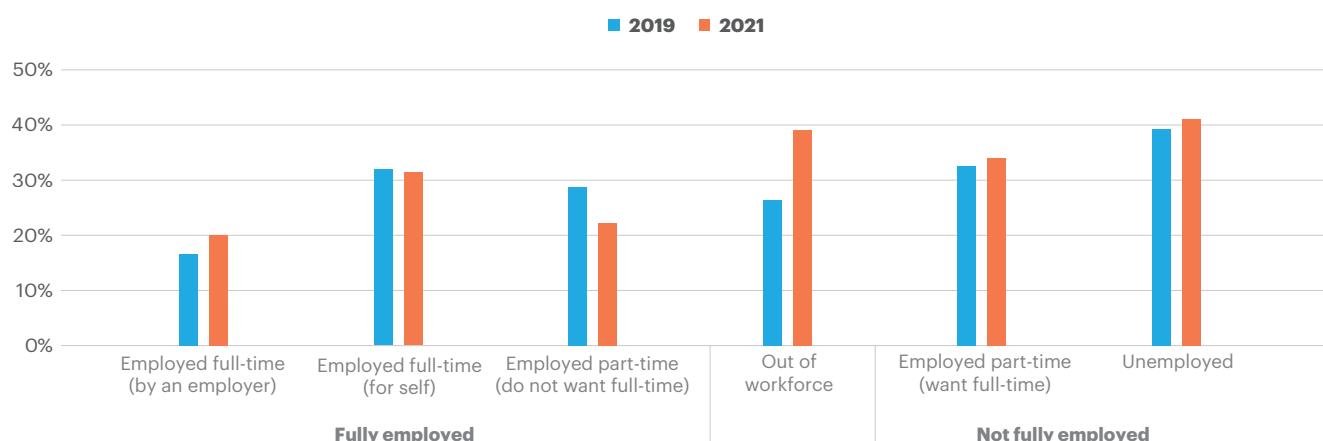
	Not fully employed	Life rated negatively	Dissatisfied with current living conditions	Struggling on present income
Not fully employed	1	0.09	0.48	0.71
Life rated negatively	0.09	1	0.26	0.26
Dissatisfied with current living conditions	0.48	0.26	1	0.74
Struggling on present income	0.71	0.26	0.74	1

Source: Gallup; IEP calculations

With regard to the categories showing strong associations, dissatisfaction with current living conditions is highly correlated with insufficient income (r=0.74), and rates of people being unemployed and underemployed show strong correlations with levels of struggle based on income (r=0.71). A moderate level of correlation exists between rates of people being not fully employed and rates of dissatisfaction with current living conditions (r=0.48). Conversely, ranking life negatively is only moderately correlated with both dissatisfaction with one’s living conditions (r=0.26) and with financial hardship (r=0.26), but has no correlation with not being fully employed (r=0.09).

FIGURE 3.9
Percentage of people rating their lives negatively, by employment status, 2019–2021

People out of the workforce reported the highest increase in rating their lives negatively.



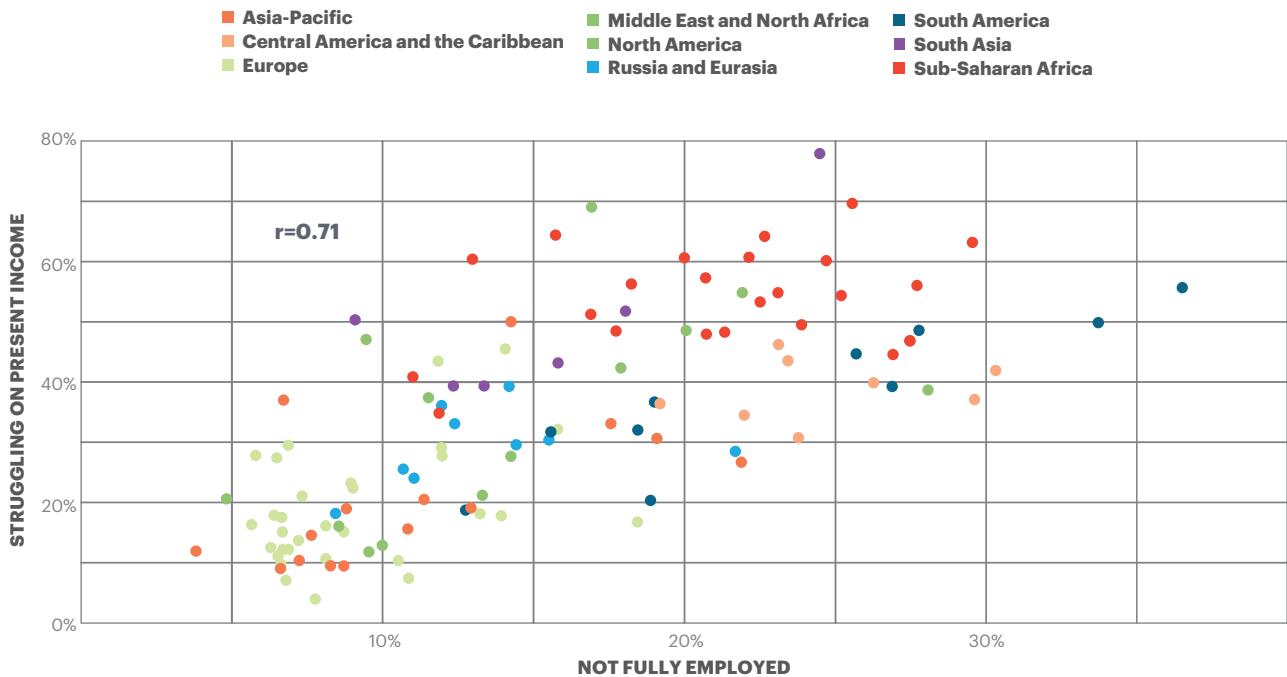
Source: World Risk Poll; IEP calculations

Note: On a 1-12 scale, (1=worst, 12=best), a negative outlook was counted as those responding 1-4.

FIGURE 3.10

Unemployment and underemployment vs. struggling on present income, 2021

Countries in sub-Saharan Africa had the highest rate of people not fully employed and higher percentage of people struggling on present income, whereas countries in Europe the lowest.



Source: World Risk Poll; IEP calculations

Note: Averages unweighted by country populations. Does not include China as information on employment status was not collected there in 2021.

Research has shown that satisfaction with one's employment has a range of benefits beyond income, such as providing balanced time structure to the day, social interaction, social networking, self-identity and purpose.³¹

The relationship between unemployment/underemployment and financial hardship is presented in Figure 3.10. From a regional perspective, countries in sub-Saharan Africa and South Asia recorded the highest rates of unemployment and underemployment in 2021, while Europe and North America recorded the lowest rates.

Sub-Saharan Africa had the greatest density of countries with high rates of people not fully employed and the highest rates of people struggling on their present incomes. While sub-Saharan

African countries experienced high economic growth rates prior to 2020,³² according to the ILO, much of the employment growth was in the agriculture and informal self-employment, making the gains fragile.³³ Europe, on the other hand, recorded the most countries with low rates of people not fully employed as well as the lowest rates of people struggling on their present incomes. The results from European countries suggest that stable macroeconomic conditions; job retention schemes, and social security systems can moderate people's perceptions of their living conditions; and such practices can have benefits across society and across employment groups.³⁴

4 | Traffic and Road Safety

In both the 2019 and 2021 World Risk Polls, road-related accidents were the single most commonly cited threat to safety in people's daily lives. Despite this, there was a substantial decline in the percentage of people listing road safety as their top concern, falling from a response rate of 17.9 per cent in 2019 to 12.9 per cent in 2021.

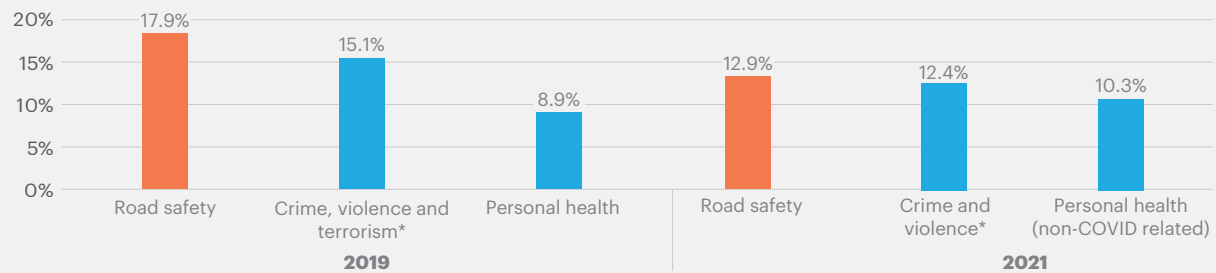
Historically, death rates from road traffic collisions have been declining for decades; however, the fall between the two sample years is substantial and may be driven by reduced mobility and road activity in the context of the COVID-19 pandemic. This is discussed in more detail later in the section. The only category to experience a larger decline was the "nothing/no risks" option, which fell by 8.2 percentage points. As shown in Figure 4.1, road and traffic-related risk in 2021 was rated only half a point higher than the second most cited risk, crime and violence, in 2021.¹

The 2021 survey also revealed far higher levels of experience in relation to serious harm from traffic or roadside accidents than for any other risk domain in the SPI, as shown in Figure 4.2. With an average of 32.7 per cent of people experiencing road-related harm globally, the rate stood 6.6 percentage points higher than severe weather, the second highest ranked type of harm. In light of the prevalence of road harm experiences, it is unsurprising that the category was also associated with the most widespread levels of worry, with an average of 39.3 per cent of people expressing significant worry about road harms globally.

FIGURE 4.1

Three most commonly cited risks, 2019 and 2021

Despite a substantial decline in people who listed it as their top concern between 2019 and 2021, road safety was the single most commonly cited risk both years.



Source: World Risk Poll; IEP calculations

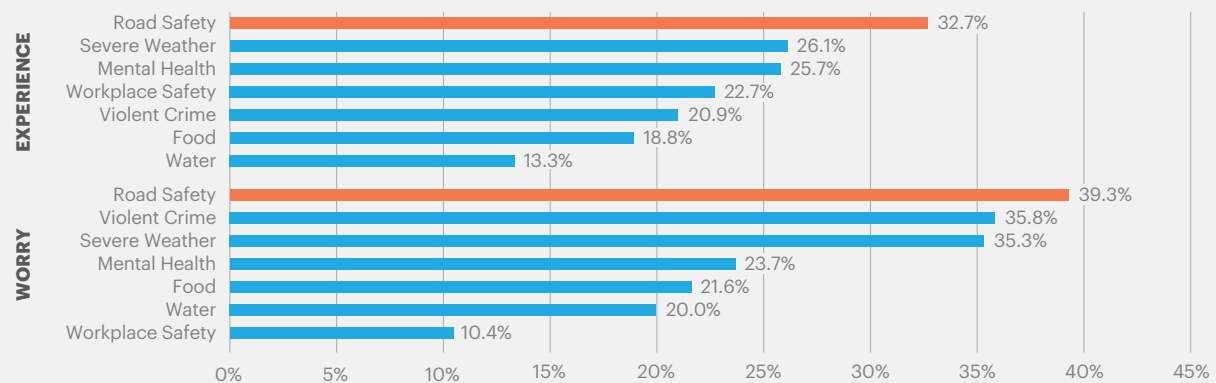
Note: "Nothing/no risks" and "don't know" are not included.

*The "crime, violence and terrorism" category was broken into two categories in 2021: "crime and violence" and "war and terrorism". The 2021 number counts only responses to the "crime and violence" response. Response rates from China are excluded as this question was not asked there in 2021.

FIGURE 4.2

Levels of harm experience and worry about risks, by category, 2021

Globally, there were higher levels of experience and worry in relation to road harm than for any other category of risk.



Source: World Risk Poll; IEP calculations

Note: Averages across 121 countries, unweighted by country populations.

Changes in perceptions about road safety

As shown in Figure 4.3, fewer people around the world ranked road and traffic-related accidents and injuries as their top safety concern in 2021 than in 2019. The ranking changes varied by country, and the overall decrease may be attributed to various changes in concerns.² Afghanistan, for example, had the largest relative decrease in ranking road safety as the greatest daily safety risk, while it saw war and terrorism and economic issues as the top concerns in 2021. By contrast, South Korea recorded the largest relative rise in people ranking road safety as their top concern, despite official government data showing a decrease in traffic accidents, injuries and deaths in the country between 2019 and 2020.³

Globally, the decline in the rates at which people ranked road-related harms as their top concern may also be the result of reductions in people's mobility and reduced utilisation of roadways in the context of the COVID-19 pandemic. Due to stay-at-home orders and other restrictions on movement, road traffic volume was reduced during the pandemic.⁴

While global road fatality data for 2020-2021 is not yet available; data from 36, mostly high-income countries showed that, on average, road fatalities declined by 9.9 per cent between 2019 and 2020. However, this decrease was largely in line with annual rates of decline in road fatalities over the previous several years, with studies concluding that roughly the same number of people died from car crashes during the pandemic as would have been expected in its absence.^{5,6} Further, analysis of the data from these countries showed no correlation between changes in countries' road fatality rates and their stay-at-home rates ($r=-0.06$) and only a moderate correlation between changes in fatality rates and the stringency of government measures to curb the spread of COVID-19 ($r=0.30$).⁷

The fact that road fatalities did not experience a precipitous drop despite the dramatic reductions in mobility around the world has been attributed to changes in drivers' behaviours on the less crowded roadways witnessed during the pandemic. Drivers' perceptions of road safety are based on visual information, including the presence of other vehicles;⁸ therefore, emptier roads are linked to an increase in average vehicle speeds and speed-related road violations as drivers perceive less risk in driving faster.⁹ There was also an increase in driver aggressiveness and inattentiveness during the early months of the pandemic, shown through increases in average speed and instances of harsher braking during this time period.¹⁰

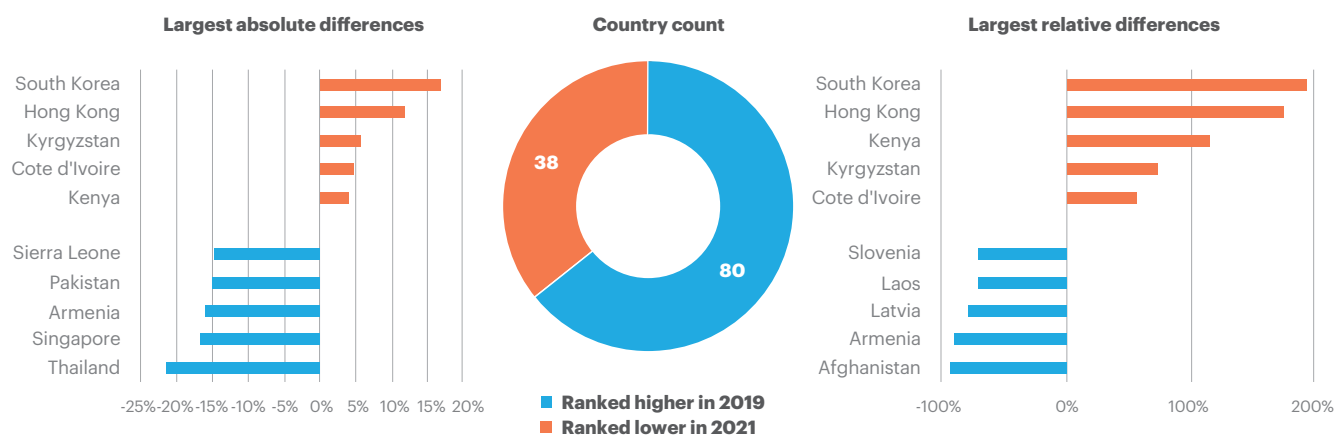
Road crash victims had difficulty accessing resources, such as hospitals and relief services due to overrun medical systems during the pandemic.¹¹ There was also a significant drop in high-risk trauma patients visiting hospitals and emergency departments, which may have reduced COVID-19 mortality rates, but harmed non-COVID-19 patients.¹² Hospital care during the pandemic also saw increased mortality rates for road crash and trauma patients in hospitals compared to pre-pandemic rates; this may have been caused by delayed admissions for non-COVID-19 patients due to the overwhelming amount of COVID-19 patients, which in turn could have had a range of negative outcomes for patients.¹³

As a result, while the number of road crashes and collisions may have decreased during the pandemic, such improvements may have been offset by increases in the severity of collisions and by victims being unable to obtain timely medical services due to an overwhelmed medical sector.

FIGURE 4.3

Changes in ranking of road safety as top safety concern, by country, 2019–2021

In 2021, most countries saw a decrease in people ranking road safety as the greatest risk to daily safety.



Source: World Risk Poll; IEP calculations

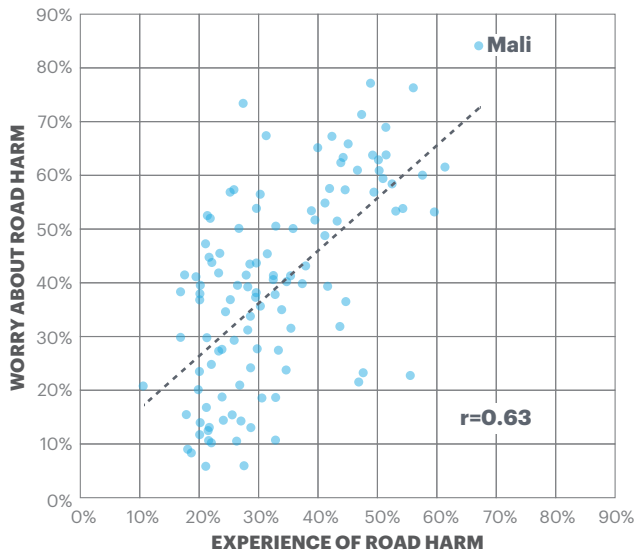
Note: This question was not asked in China in 2021. Absolute difference refers to the raw discrepancy between two percentages, while relative difference refers to the proportional discrepancy between them. For example, if a country had an experience rate of 20 per cent and a worry rate of 30 per cent, worry would be 10 percentage points higher than experience in absolute terms, but it would be 50 per cent higher in relative terms.

Country and regional results

Levels of experience with and worry about harm from road traffic collisions vary widely across countries and regions. In general, as the rates of experience with road harms increase, so too do levels of worry. Around the world, levels of experience with and worry about road harm show a strong positive correlation ($r=0.63$), as shown in Figure 4.4.

FIGURE 4.4
Levels of road harm experience and worry, by country averages, 2021

Experience and worry about road harm show a strong positive correlation.



Source: World Risk Poll; IEP calculations

At the regional level, sub-Saharan Africa had the highest average level of experience of road harm, at 49.7 per cent, as well as the highest average level of worry about road safety, at 64.4 per cent, as shown in Figure 4.5. All of the 22 surveyed countries in the region had rates of worry of road harm above 50 per cent, and 14 of them had rates of experience of road harm above 50 per cent.

Outside of sub-Saharan Africa, only 18 countries had road harm worry rates over 50 per cent and only three had road harm experience rates over 50 per cent. Mali had the highest global rates of road harm experience and road harm worry, at 67.1 and 83.8 per cent, respectively. Road safety in Mali is discussed in greater detail in Box 4.1.

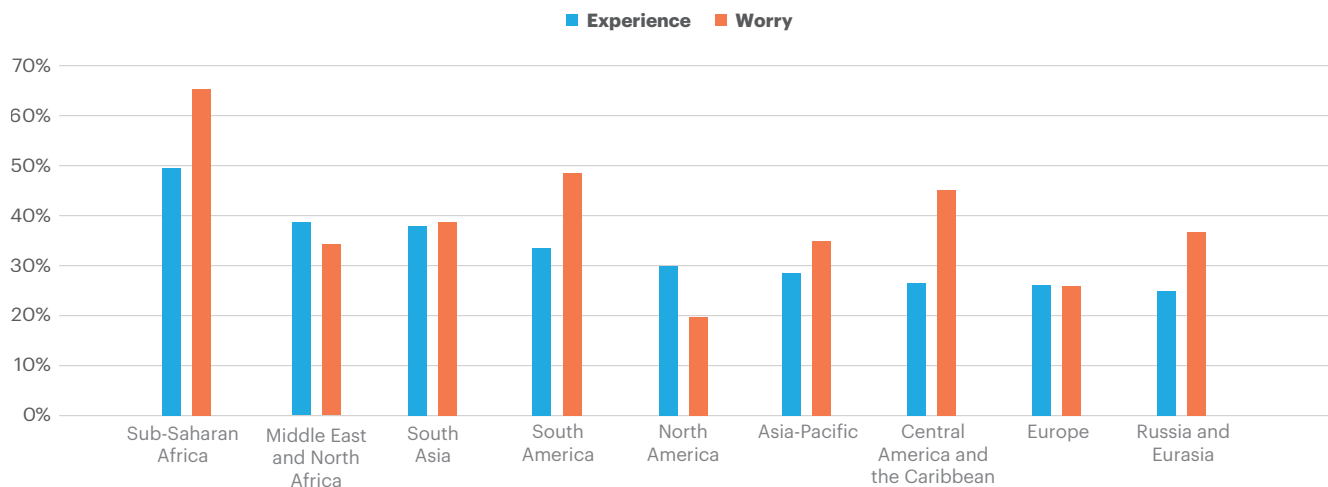
In contrast, Europe was the region with the lowest average level of experience of road harm, at 25.5 per cent, and North America had the lowest level of worry of road harm, at 19.6 per cent. Sweden had the lowest levels of worry about road harm of any country, as shown in Figure 4.6, while Uzbekistan had the lowest levels of experience with road harms of any country, as shown in Figure 4.6.

Most countries and regions show higher levels of worry than experience with road harms, as reflected in Figure 4.7. Only two regions had higher levels of experience than worry, while 30.6 per cent of countries had higher rates of experience of road harm than worry.

With regard to the rates of worry in comparison to rates of experience, Central America and the Caribbean had the largest difference, with worry being 17.3 percentage points higher than experience. Europe had the smallest, with worry being just 0.1 percentage points higher than experience.

FIGURE 4.5
Levels of road harm experience and worry, by region, 2021

Sub-Saharan Africa had the highest levels of both experience and worry of road harm out of all regions.

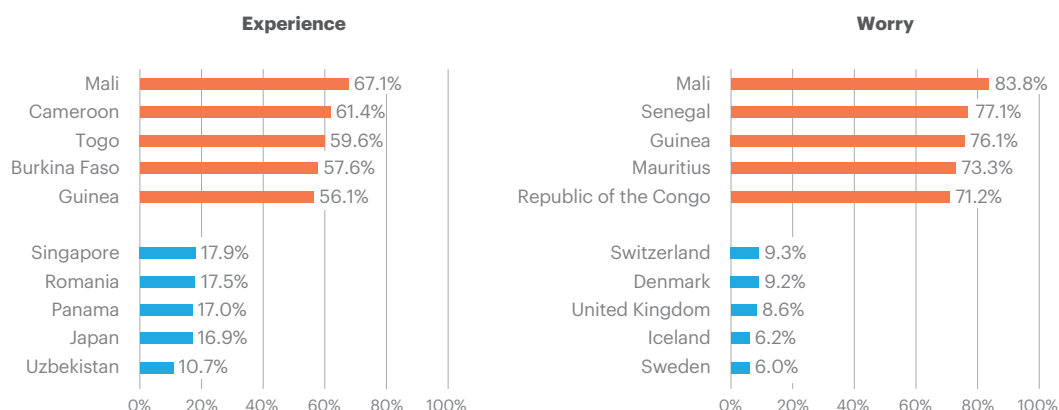


Source: World Risk Poll; IEP calculations
Note: Averages unweighted by country populations.

FIGURE 4.6

Highest and lowest levels of road harm experience and worry, by country, 2021

Mali was the country with the highest levels of experience with and worry about road harm, while Uzbekistan reported the lowest levels of experience and Sweden reported the lowest levels of worry.

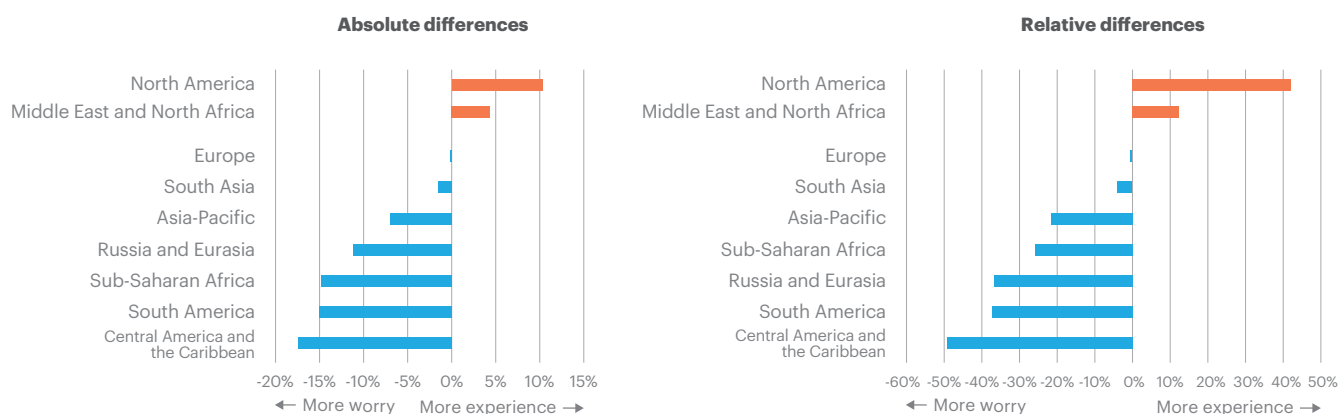


Source: World Risk Poll; IEP calculations

FIGURE 4.7

Difference between levels of road harm experience and worry, by region, 2021

North America recorded much higher levels of experience of road harm than worry, while Central America and the Caribbean had much higher levels of worry than experience.



Source: World Risk Poll; IEP calculations

Note: Averages unweighted by country populations. Absolute difference refers to the raw discrepancy between two percentages, while relative difference refers to the proportional discrepancy between them. For example, if a country had an experience rate of 20 per cent and a worry rate of 30 per cent, worry would be 10 percentage points higher than experience in absolute terms, but it would be 50 per cent higher in relative terms.

North America and the Middle East and North Africa were the only regions recording higher levels of experience of road harm than levels rate of worry. North America had the larger discrepancy between experience and worry of the two regions, with a 10.4 percentage point difference, which is equivalent to a relative difference of 41.9 per cent, while also having the lowest level of worry out of all regions.

Road safety, peacefulness and income

As peace deteriorates so does the experience of road harm and worry, as shown in Figure 4.8. Moreover, for all countries other than very high peace countries, worry exceeds rates of experience. There are many factors that influence the relationship between road harm and peace; ultimately, higher peace countries tend to be economically prosperous, meaning that they can invest more in road safety measures.¹⁴

There are many factors leading to the relationship between peace and road harm. Countries may lack the financial or organisational capacities to carry out or prioritise enforcement of road laws, often as a result of under-resourced traffic authorities. In addition, sound road design and infrastructure are more likely to be absent in countries with lower levels of peace. Rapid-response medical and post-crash care services are also more likely to be better maintained in countries with higher peace levels.¹⁵

The Global Burden of Disease research program uses a Socio-Demographic Index (SDI) score that measures a country’s development in finance, education and healthcare. Countries with the highest SDI scores were the only ones to record a decrease in incidences of road harm from 2017-2019. The viability of road safety measures is inevitably linked with economic development, and high-income countries are more likely to be able to invest in strong safety measures.¹⁶

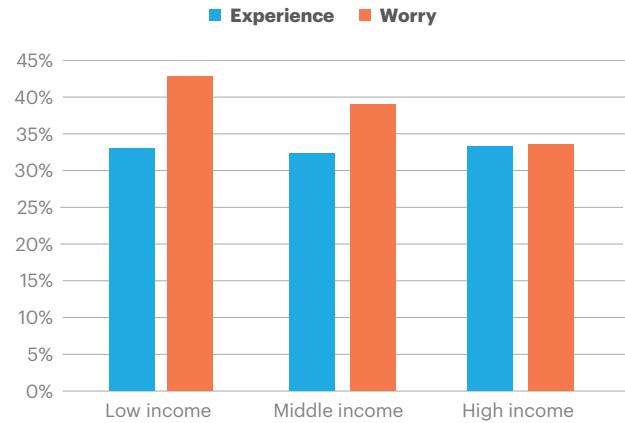
Shown in Figure 4.9, reported experience of road harm remains steady across all income groups. However, as income level increases, worry about road harm declines. The economic cost of road harm, such as medical services or the cost of life-long disabilities, may represent a larger burden to lower income groups who may not be able to afford the costs of treatment or who may be hit harder by the loss of income caused by

disability. Regulations are not as stringent in low-income countries, which may result in more severe injuries.

While road harm does not differ greatly by individual income group, road safety issues differ by country income group. Road fatality rates are more than three times higher in low-income countries than high-income countries.¹⁷ Low-income countries and middle-income countries also report that 90 per cent of all reduced life expectancies are due to injuries from road harm. The economic cost of road harm, however, is greater for high-income countries where treatment and infrastructural damage costs tend to be higher. Furthermore, high-income countries are more likely to have greater per capita loss of earnings for injured workers.¹⁸

FIGURE 4.9
Levels of road harm experience and worry, by country income group, 2021

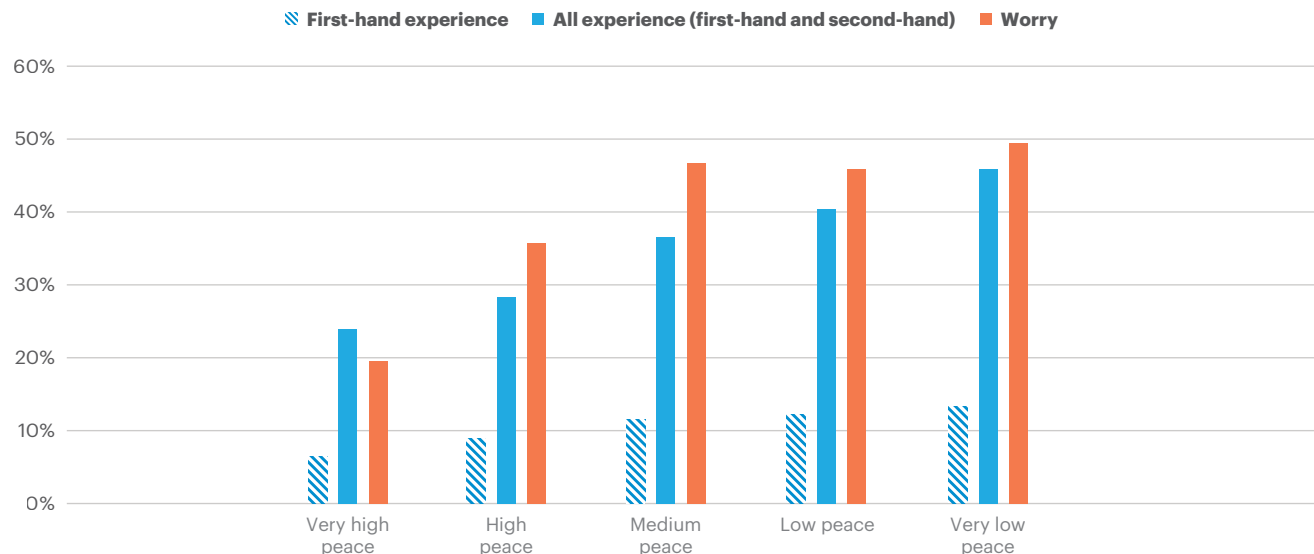
Worry about road harm declines as country income increases, while experience remains the same.



Source: World Risk Poll, IEP calculations

FIGURE 4.8
Levels of road harm experience and worry, by peace levels, 2021

Experience and worry of road harm increases as country peace level decreases.



Source: World Risk Poll; IEP calculations
Note: Averages unweighted by country populations.

BOX 4.1

Highest levels of road harm worry and experience – Mali

As discussed previously, Mali has the highest level of reported experience of road harm and the highest level of worry. According to the 2022 Global Peace Index, Mali is a very low peace country, ranking 150th out of the 163 included countries. Mali is not in compliance with a majority of United Nations vehicle safety regulations, such as road “speed calming” safety measures that encourage drivers to slow down. The country also only provides partial coverage in response to its national emergency phone number.¹⁹

As a percentage of GDP, Mali also spends less on healthcare than the global average and has seen a steep decline in such spending since 2006.²⁰ According to the Global Health Observatory (GHO), Mali reported 4,465 road deaths in 2019, equivalent to 22.71 deaths per

100,000 people. Mali’s road fatality rate was also higher than the global average for 2019, which was 17.1 deaths per 100,000 people. It is also likely that many road deaths in Mali are not reported.

In recent years, poor road quality and associated deaths from road accidents have become a source of national social tension in Mali.²¹ Of Mali’s 21,681 kilometres of road, only 33 per cent are paved, and are still dangerous to drive on due to deteriorating road conditions, bumps and weather. Protests and demonstrations against road degradation are frequent in Mali, and often target trade hubs and, once in 2019, the airport of Timbuktu.²² To some in Mali, road accidents are considered as lethal as certain diseases, like COVID-19 and malaria.²³

World Risk Poll data shows reported experience and worry of road harm declines with age. As shown in Figure 4.10, 38.7 per cent of people aged 15-29 reported experience with road harm, the highest of any age group. They also reported the highest level of worry, at 32.7 per cent. Respondents aged 65 or older reported the lowest absolute levels of experience and worry of road harm.

Teenagers and young adults are more likely to face road risks because they are more likely to be inexperienced drivers. Young people drive most frequently at night and are therefore at increased risk due to dark driving conditions and fatigue. Teenagers are especially likely to get into crashes in the first month of getting their driver’s licenses or due to reckless speeding at night.²⁴ Elderly drivers are more experienced and more likely to exhibit safer driver patterns, such as limiting their

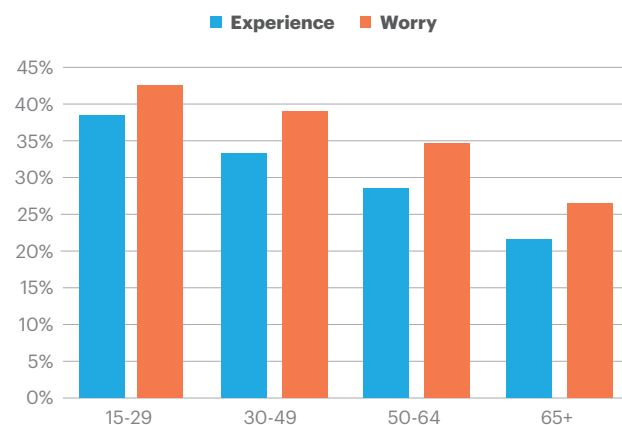
speed as well as where and when they drive based on potentially hazardous conditions and the time of day,²⁵ which may result in their lower levels of experience of road harm. However, the 65 and older age group show the highest levels of worry about road harms compared to their experience. The average rate of worry of people aged 65 and older is 4.9 percentage points higher than their experience. In contrast, the average rate of worry of people aged 15 to 29 is 3.7 percentage points higher than their experience. Elderly people’s heightened levels of worry about road harm relative to the rates at which they experience it may in part be a result of fragility, measured as the likelihood of death when a person is involved in a car crash, which increases with age.²⁶

Despite young people’s low levels of relative worry, the World Health Organisation (WHO) reports that road traffic injury is the leading cause of death for people aged 15-29.²⁷ For young drivers, the lethality of road accidents is heavily influenced by gender and the number of passengers they drive with, as dangerous driving behaviours such as drinking, speeding and running red lights can be heavily influenced by the social pressure of peers. For 16 and 17-year-old male drivers, a teenage male passenger in the vehicle increases the driver’s fatality rate from 1.64 to 2.81 deaths per 1,000 crashes, and two or more teenage male passengers increase the driver’s fatality rate to 3.26, nearly doubling the initial fatality rate. In contrast, one teenage female passenger decreases the male driver fatality rate to 1.61 per 1,000 crashes. For female drivers, two teenage female passengers increase the driver’s fatality rate from 1.18 to 1.36 deaths per 1,000 crashes, while two male passengers increase the fatality rate to 2.84, more than doubling the fatality rate.²⁸

Figure 4.10 shows that the road injury rate differs by age group and sex. The highest overall instances of road injury fall among the 20-29 years age groups, and they progressively decline among older groups. Across all groups, men consistently have higher levels of injury than women. The highest injury rate belongs to men ages 20-24, who are injured 2.62 times more frequently from road accidents than women.

FIGURE 4.10
Levels of road harm experience and worry, by age, 2021

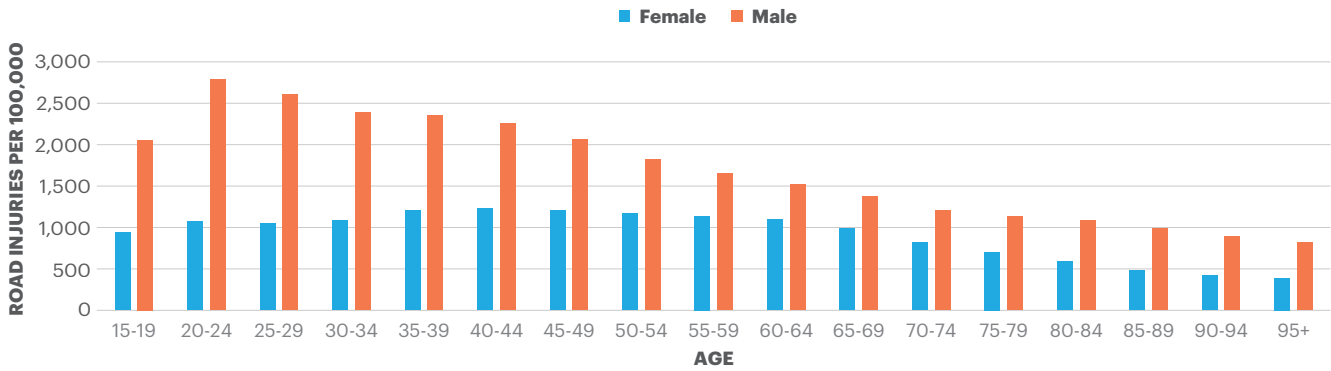
Experience and worry of road harm decline as age increases.



Source: World Risk Poll, IEP calculations

FIGURE 4.11
Road injury rates, by age and sex, 2019

Across all age groups, men consistently had higher rates of road injury than women.

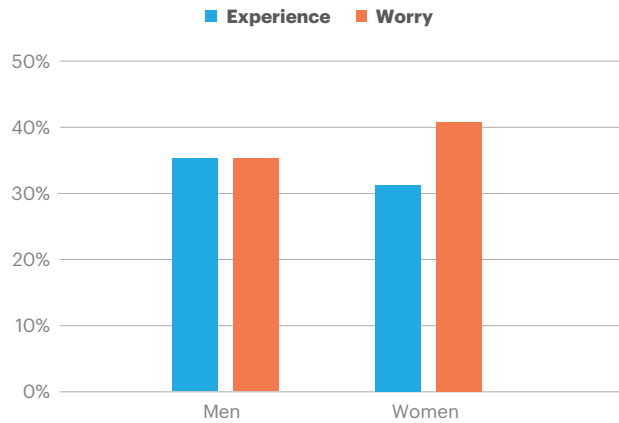


Source: Global Burden of Disease; IEP calculations

Such dynamics are also reflected in the findings of the World Risk Poll. According to its data, men have higher rates of experience with road harm, as shown in Figure 4.12. Men experience harm at almost the exact same rate they worry about it. Women, on the other hand, relative to their level of experience, worry about road harm 10.1 percentage points more. One study shows that women report higher levels of anxiety about potentially dangerous driving conditions and are more likely to self-regulate when and where they drive.²⁹

FIGURE 4.12
Levels of road harm experience and worry, by sex, 2021

Men have a higher level of reported experience of road harm, while women have a higher level of worry.



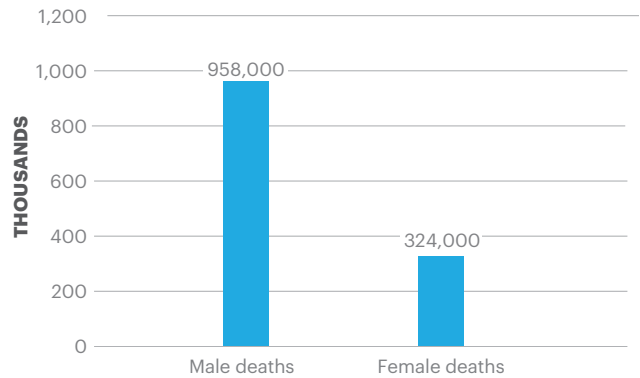
Source: World Risk Poll; IEP calculations

Data suggests that women’s deaths from traffic-related incidents are associated with higher levels of societal worry about road safety than men’s deaths. Female road deaths per 100,000 people have a higher correlation with worry about road harm ($r=0.67$) than male road deaths per 100,000 people ($r=0.52$). They also show a stronger inverse correlation with people’s levels of satisfaction with roads and highways ($r=-0.52$) than male road deaths do ($r=-0.40$).

These findings may in part result from the fact that women’s deaths from traffic-related incidents are far rarer occurrences than men’s deaths. According to GHO data, in 2019 nearly a million men died as a result of road traffic collisions, compared to fewer than 325,000 women, as shown in Figure 4.13. A study on driving patterns by gender found that men had the highest proportion of their road crashes while engaging in dangerous driving behaviour, such as overtaking other vehicles and driving in the dark, while women had the highest proportion of their road accidents at road junctions. Men also drive at higher average speeds than women, potentially resulting in the higher road injury and fatality rates for men.³⁰

FIGURE 4.13
Road deaths, by sex, 2019

In 2019, there were nearly three times as many male deaths than female deaths from road accidents.



Source: Global Health Observatory; IEP calculations

It is important to highlight that men are more likely than women to drive, as this also helps explain the disproportionate number of male road deaths. While there is limited data on global driving rates, it has been found that men in the United States drive more miles than women and that four out of five professional drivers – including truck drivers and taxi drivers – are men. In part as a result of this, men account for the overwhelming majority (98 per cent) of all large truck driver deaths in the country.³² Moreover, it is likely that male driving rates in comparison to female driving rates are significantly

higher in most middle-income and low-income countries, particularly as lower workforce participation and different gender roles often means that women commute less and travel shorter distances than men. For example, in South Africa, government statistics show that 41 per cent of men commuted by car in 2020, compared to only 29.2 per cent of women.³³

Long-term improvements in road safety

Road safety has been consistently improving over the last few decades. Figures 4.14 and 4.15 show the inverse relationship between registered cars and global road deaths per 100,000

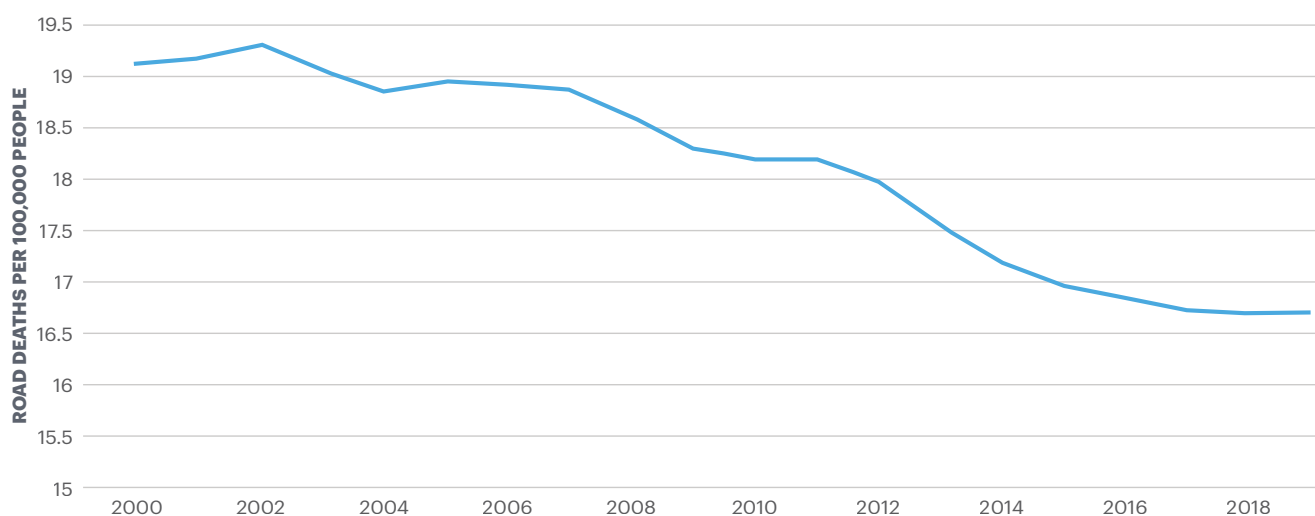
people. While total global vehicle registrations have increased, road fatalities have been steadily decreasing. Overall, road fatalities have decreased by 2.4 percentage points since 2000, even though the number of cars and kilometres travelled have increased.

Data from 2019 shows that 58.4 per cent of countries have less than one road fatality per 1,000 registered vehicles per year, with the median number of fatalities standing at 0.61. However, countries range widely in this regard, with 25 experiencing fewer than 0.1 annual road deaths per 1,000 vehicles and 16 experiencing more than ten.

FIGURE 4.14

Global road death rate, 2000–2019

Global road deaths are measured per 100,000 people to account for annual increases in the world's population.

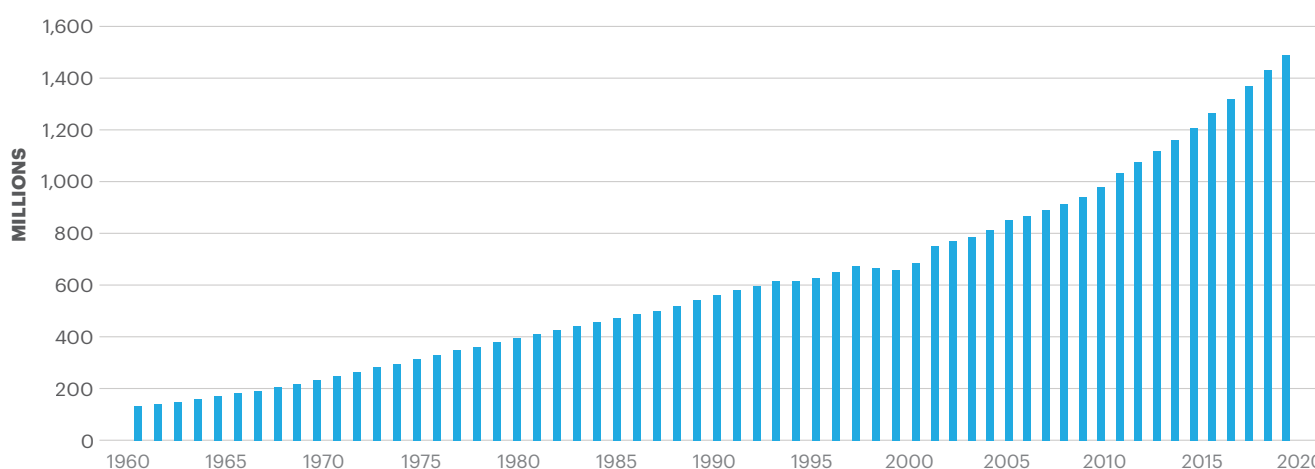


Source: Global Health Observatory; Oak Ridge National Laboratory; IEP calculations

FIGURE 4.15

Global vehicle registrations, 1960–2019

Around 2010, the number of cars on the road globally surpassed one billion.

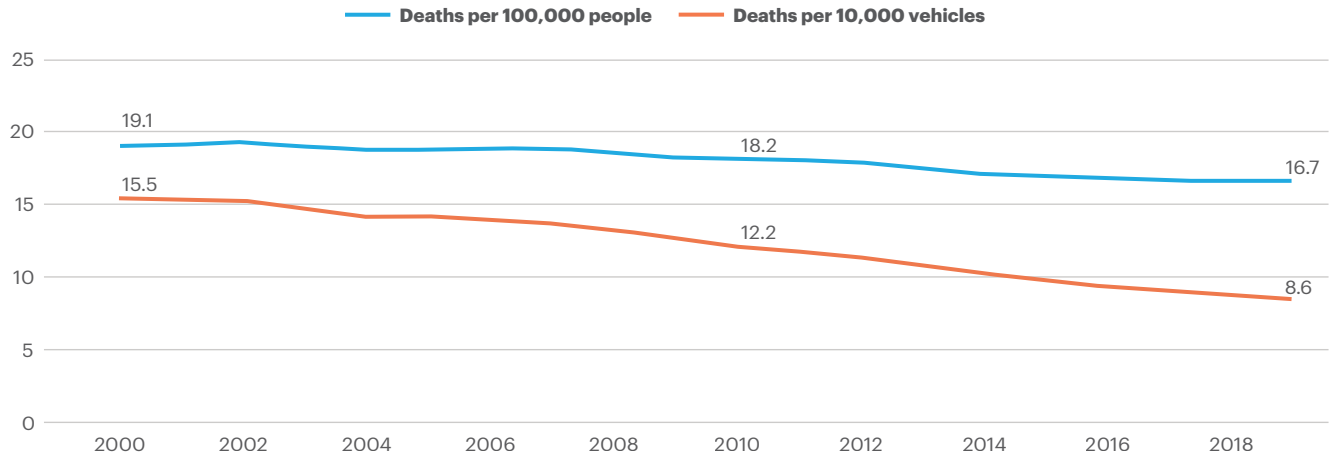


Source: Ward's Auto; Oak Ridge National Laboratory; IEP calculations

FIGURE 4.16

Global road death rates by people and registered vehicles, 2000–2019

Despite more cars being on the road, the instances of road fatalities are decreasing sharply.



Source: Global Health Observatory, Oak Ridge National Laboratory; IEP calculations
 Note: Death rates are shown per 100,000 people and per 10,000 vehicles.

Despite more cars being on the road, the instances of road fatalities are sharply decreasing.³⁴ Shown in Figure 4.16, deaths per 10,000 registered vehicles have been decreasing at a steeper rate than global road deaths per 100,000 people. This decrease in road deaths can be attributed to stricter road traffic and safety laws, improved medical care, and more efficient and well-manufactured vehicles. Advancements in safety features such as airbags, brakes, seatbelts, rear-view cameras, lane-departure systems and tire pressure monitors have helped decrease the impact of human error in driving.³⁵ Industrial improvements in steel strength, as well as in aluminium, magnesium and carbon fibre, have also improved the way in which cars crumple during collisions.³⁶ Current automotive technology is even venturing into artificial intelligence and self-driving vehicles for public use; according to World Risk Poll data, however, 65.4 per cent of people globally would not yet feel safe in a self-driving car.

Another factor that may contribute to the decrease in road fatalities is the steady improvement in road quality globally, which makes driving safer for drivers, cyclists and pedestrians. Satisfaction with the quality and conditions of roads and

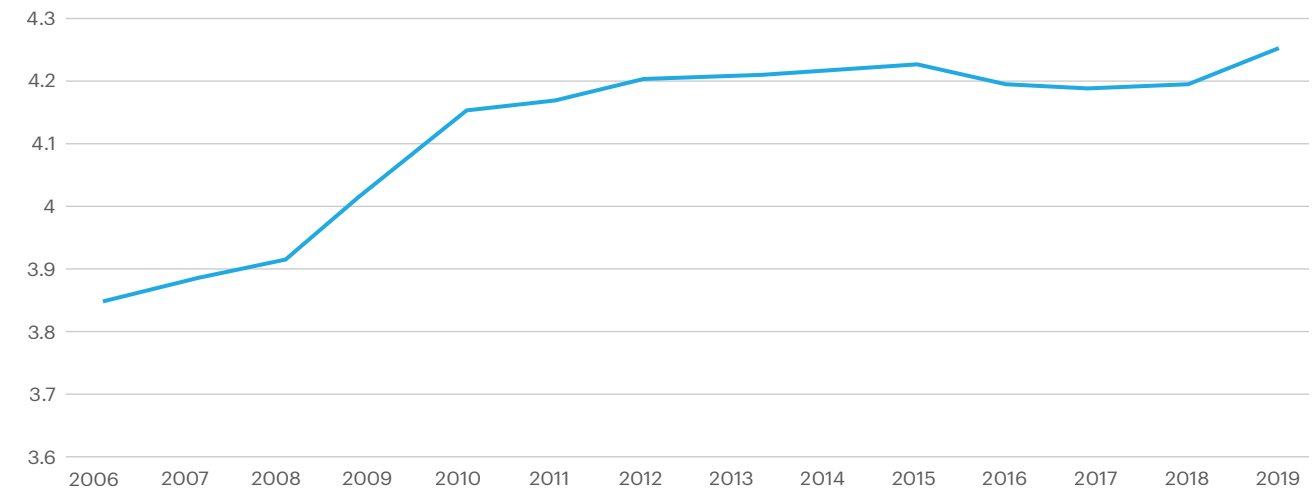
highways correlates negatively with worry of road harm ($r=-0.62$) as well as with experience of road harm ($r=-0.54$). Figure 4.17 uses the Global Road Quality Score generated by the World Economic Forum, which averages survey respondents' ratings of the quality of roads in their country from one, ("underdeveloped") to seven ("extensive and efficient by international standards"). As shown, global road quality has been improving over the past two decades. Worry of road harm also correlates negatively with the road quality score; as the road quality score decreases, respondents are more likely to be worried about road harm ($r=-0.52$).

In comparison to the declining trend in global road deaths, the incidence of global road injuries has been increasing over the past two decades, as shown in Figure 4.18. However, in more recent years, the rate of injuries has plateaued and even declined. The relationship between road deaths and road injuries suggests that the improved conditions of road safety and medicine are resulting in less fatal car accidents. Developments in road safety, such as driving laws and road

FIGURE 4.17

Average global road quality score, 2006–2019

Road quality around the world has been steadily improving over the past two decades.

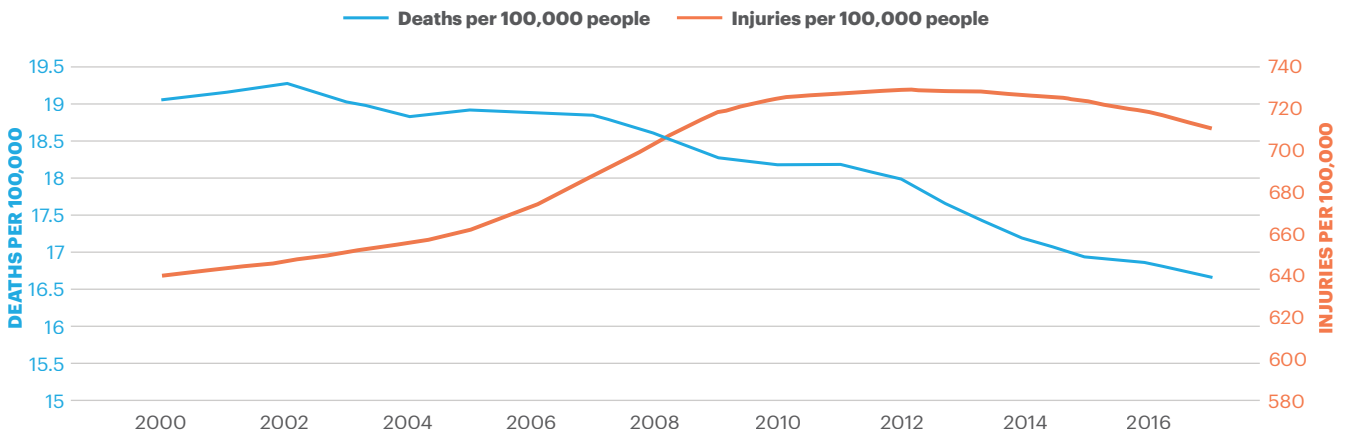


Source: World Economic Forum; IEP calculations

FIGURE 4.18

Global road death and injury rates, 2000–2017

While global road deaths per 100,000 people have been declining, the incidence of global road injuries per 100,000 people increased over the past two decades.



Source: Global Health Observatory; Oak Ridge National Laboratory; IEP calculations

quality, and improvements in post-crash care have both contributed to reducing the severity of road collisions, meaning that people are less likely to die.³⁷

Particularly, developments in seat belt manufacturing and mandatory usage legislation have significantly contributed to reducing road death rates. Starting in North America and Europe in the 1960s, the 3-point seat belt design and following mandatory legislation of its usage for drivers and front-seat occupants were widely implemented, although enforcement was weak.

The popularity and acceptance of seat belts has been heavily influenced by government regulatory efforts to promote safe driving and seat belts.³⁸ According to the WHO, now, 71 per cent of the world’s population live in countries with highly effective seat belt practices, such as mandatory restraint manufacturing in vehicles, strict usage enforcement and public encouragement.

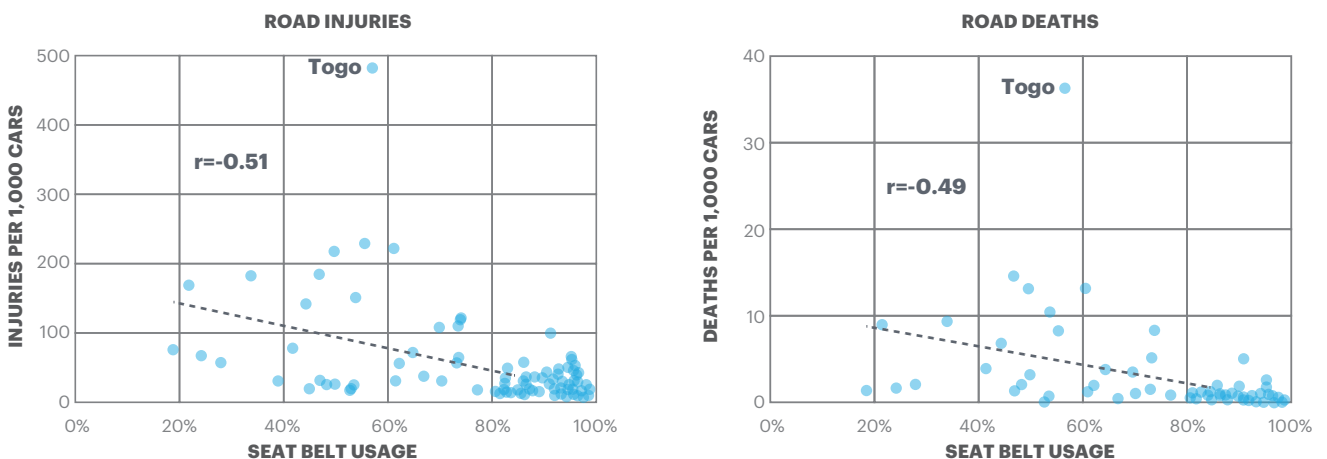
Seat belts reduce risk of death for drivers and front seat occupants by 45-50 per cent, and by at least 25 per cent for rear seat occupants. Seat belts are also highly effective when adapted as child restraints; proper restraints for children such as booster seats and car seats can reduce risk of death for children by at least 60 per cent. A majority of data on seat belts, however, is only available in high-income and middle-income countries; and of the countries with effective seat belt practices, only seven per cent are low-income countries. Furthermore, no low-income country meets the standards for effective child-restraint practices, while 85 per cent of the countries that do are high-income countries.³⁹

The 2019 World Risk Poll also asked respondents about their usage of seat belts. Its data confirms that national seat belt usage rates are associated with reductions in road injuries and road deaths, and negatively correlated with both road injuries and deaths per 1,000 registered vehicles, as shown in Figure 4.19.

FIGURE 4.19

Road injuries and deaths per 1,000 cars vs. seat belt usage, 2019

Seat belts have proven to be an effective road safety measure in decreasing both road injuries and road deaths.



Source: World Risk Poll; Global Health Observatory; IEP calculations

The WHO has reported that global progress is consistently being made in improving road safety laws, road infrastructure, vehicles and medical responses. The WHO has also renewed its Decade of Action for Road Safety for 2021-2030, which, as in the previous decade, aims to prevent 50 per cent of future traffic deaths and injuries through funding road design, enhancing road safety laws, and improving post-crash responses globally. The United Nations' Sustainable Development Goals (SDGs) also include SDG 3.6, which aims to reduce the number of global deaths and injuries from traffic accidents by 50 per cent.

Despite the decreasing rate of road fatalities, and the recent decrease in road injuries, road injuries are still very high overall. As such, road safety continues to weigh heavily on people's minds, as reflected in the fact that it was the most commonly cited concern with the highest level of experience and worry in the World Risk Poll. Road incidents claim over one million lives per year, and while data on disabilities due to road incidents is not widely available, it is estimated that for every road death, there are 20-50 people who are injured and faced with potential disability.⁴⁰ To ensure that road fatalities and injuries continue their downward trends, governments should continue investing in road infrastructure and post-crash care as well as increasing driving education for young people, and especially young men.

Methodology

This is the second edition of the Lloyd's Register Foundation Safety Perceptions Index (SPI), which measures the impact of risk around the world. Its results are based on the second edition of the Lloyd's Register Foundation World Risk Poll, which was administered in 2021 by Gallup to over 125,000 people in 121 countries.

In each country, a sample of around 1,000 people aged 15 and above was surveyed. These samples included people representing various demographic characteristics, including age, sex, income, and level of education. Weightings for individual survey respondents were provided with the data and have been applied to ensure that each sample accurately reflects the demographic characteristics of the wider national population.

The index incorporates five risk domains – *food and water*, *violent crime*, *severe weather*, *mental health*, and *workplace safety* – and assesses each on the basis of two cross-cutting themes – *worry* and *experience* of harm. It draws on 12 mutually comparable questions from the 2021 World Risk Poll. These questions comprise six focused on recent experiences of serious harm and six questions on worry, each for a specific category of harm:

- **EXPERIENCE:** *"Have you or someone you personally know experienced serious harm from any of the following things in the past two years?"*
 - *"The food you eat"*
 - *"The water you drink"*
 - *"Violent crime"*
 - *"Severe weather events, such as floods or violent storms"*
 - *"Mental health issues"*
 - *"The work you do" (2021 only)*
- **WORRY:** *"In general, how worried are you that each of the following things could cause you serious harm? Are you very worried, somewhat worried, or not worried?"*
 - *"Eating food"*
 - *"Drinking water"*
 - *"Violent crime"*
 - *"Severe weather events, such as floods or violent storms"*
 - *"Mental health issues"*
 - *"Work" (2021 only)*

The two cross-cutting themes capture different aspects of risk and the impact it has on society. The *experience* theme is a straight-forward measure of the prevalence of each risk in the recent past, while the *worry* domain measures how concerned people are about a given risk in the present – and by extension, how fearful they are that harm from that risk will befall them in the future. Although there is a strong correlation between the two themes, there are certain countries, regions, and types of risk for which the connection is not so clear. This disconnect may be due to certain risks being overstated or understated but might also be the result of risk mitigation strategies undertaken in countries with high levels of risk.

This edition of the SPI also includes trended analyses comparing the 2021 data to the data from the first World Risk Poll, which

was administered in 2019 in 142 countries. Of the 121 countries surveyed in 2021 and the 142 surveyed in 2019, there were 119 countries that were surveyed in both years, meaning two countries – the Czech Republic and Iceland – were surveyed in 2021 but not in 2019.

For comparison purposes, the 2019 global and regional scores shown in this report include the rates from the 119 countries for each year as well as the two new countries' 2021 rates for both years, meaning the latter have effectively unmoving rates. In contrast, the non-score-related trended analyses in the report draw on only those countries where the poll was carried out and, in some cases, specific questions were asked in both years.

These two complementary approaches were adopted to present the fullest possible picture of the overall risk landscape in 2021 while also presenting the most accurate possible measure of the changes in risk perceptions and experiences over the two-year period. If the latter were not the case, it could lead to misleading results when comparing rates between the two waves. For example, if the rates of the full list of 142 countries from 2019 were compared to those of the 121 countries of 2021, or if the 119 countries surveyed in both waves were used for the 2019 rates but all 121 countries were included for the 2021 rates, there would be distortions in the trended analyses. Differences between 2019 and 2021 rates would in part be a reflection of the changes in the composition of countries rather than a true shift in public experiences and perceptions.

On a related note, the trended analyses use unmoving 2021 scores for the *workplace safety* domain for all countries. This is because, while there were a series of questions on this subject in the 2019 survey, they were worded differently, had different focuses, and are therefore not comparable to the single question posed in 2021. Moreover, there was no worry question related to the workplace in the 2019 survey. While the absence of distinct 2019 *workplace safety* rates could potentially remove some dynamism in the overall SPI and theme scores between the two years, it ensures that any changes are the result of true movements in sentiments and experiences, and not changes in the number and type of questions posed to respondents. With the exception of the *workplace safety* domain, the rest of the questions on experiences and worries related to harm were identical between the two surveys, as shown above.

For both years, the *experience* rates have been calculated on the basis of "yes" responses to the questions about whether the respondents themselves or someone they knew had experienced serious harm from a given source in the previous two years. While the 2019 survey only included this initial question, a "yes" response in the 2021 survey would prompt a follow-up question asking respondents if the harm had happened to them, to someone they personally knew, or to both. As the responses were coded in consideration of responses to this follow-up question, the 2021 *experience* rates therefore represent the sum of the rates of these three responses.

Worry, on the other hand, was calculated on the basis of "very worried" responses. In this and the previous edition of the SPI,

TABLE 5.1

The structure of the Safety Perceptions Index

Domain	Theme	2021 Responses	2019 Responses	
Food and Water	Food (sub-domain)	Experience	% "Yes, personally experienced" + % "Yes, know someone who has experienced" + % "Both"	% "Yes" (Have personally experienced or know someone who has experienced)
		Worry	% "Very worried"	% "Very Worried"
	Water (sub-domain)	Experience	% "Yes, personally experienced" + % "Yes, know someone who has experienced" + % "Both"	% "Yes" (Have personally experienced or know someone who has experienced)
		Worry	% "Very worried"	% "Very Worried"
Violent Crime	Experience	% "Yes, personally experienced" + % "Yes, know someone who has experienced" + % "Both"	% "Yes" (Have personally experienced or know someone who has experienced)	
		Worry	% "Very worried"	% "Very Worried"
	Worry	% "Yes, personally experienced" + % "Yes, know someone who has experienced" + % "Both"	% "Yes" (Have personally experienced or know someone who has experienced)	
		Worry	% "Very worried"	% "Very Worried"
Severe Weather	Experience	% "Yes, personally experienced" + % "Yes, know someone who has experienced" + % "Both"	% "Yes" (Have personally experienced or know someone who has experienced)	
		Worry	% "Very worried"	% "Very Worried"
	Worry	% "Yes, personally experienced" + % "Yes, know someone who has experienced" + % "Both"	% "Yes" (Have personally experienced or know someone who has experienced)	
		Worry	% "Very worried"	% "Very Worried"
Mental Health	Experience	% "Yes, personally experienced" + % "Yes, know someone who has experienced" + % "Both"	% "Yes" (Have personally experienced or know someone who has experienced)	
		Worry	% "Very worried"	% "Very Worried"
	Worry	% "Yes, personally experienced" + % "Yes, know someone who has experienced" + % "Both"	% "Yes" (Have personally experienced or know someone who has experienced)	
		Worry	% "Very worried"	% "Very Worried"
Workplace Safety	Experience	% "Yes, personally experienced" + % "Yes, know someone who has experienced" + % "Both"	Not available (for comparison purposes, 2021 values used in aggregating overall 2019 SPI scores)	
		Worry		% "Very worried"
	Worry	% "Yes, personally experienced" + % "Yes, know someone who has experienced" + % "Both"		
		Worry		% "Very worried"

it was decided to focus exclusively on “very worried” response rates, rather than a combination of “somewhat worried” and “very worried” rates, because the latter were generally found to lack sufficient variation across domains and countries. The “very worried” rates were therefore selected as a better measure of “true” worry. Table 5.1 gives a full outline of the structure of the index.

Constructing and interpreting the SPI

Each of the domains in the SPI is equally weighted. There are a number of different qualitative or statistical approaches that can be used in weighting indicators or domains in a composite index. However, for ease of interpretation and in consideration of the fact that each of the domains represents a risk with the potential to severely harm (physically, psychologically and financially) or even kill poll respondents, each domain was given the same importance and weighting.

As a result, the score for each domain is the average of the *experience* and *worry* response rates. As the potential value for each indicator was already bound between 0 and 100 per cent, there was no need to normalise or transform the data to make different indicators comparable. The final index score for each country is therefore between 0 and 1. For a country to achieve a score of 0, none of the respondents from that country would report being very worried about any of the risks and none would have experienced serious harm or personally known someone who had experienced serious harm from that risk in the previous two years. Conversely, to achieve the maximum score of 1, every respondent would have to report being very worried about each risk and have experienced serious harm or personally known someone who has from each risk in the previous two years.

Scores between 0 and 1 are more difficult to interpret. A country might receive a score of 0.3 because a third of respondents have been equally impacted by each risk, or because they have been more strongly impacted by some risks than others. However, given that there are strong correlations between the two themes and across the domains, the index score can be roughly thought of as the percentage of people in a country who have been strongly impacted by most types of risk.

There are trade-offs involved in the creation of any composite index. Although the SPI provides a clear, comparable measure of the impact of risk across countries, no single measure can fully capture every aspect of a topic as broad and complex as risk. The index as it stands is missing data related to a number of aspects of risk that were rated as strong concerns by many poll respondents.

The global SPI scores shown in this report are based on unweighted averages across the 121 surveyed countries, meaning that rates of *experience* and *worry* in high-population countries are counted equally to those in low-population countries. Scores and rates at the regional level and by peace-level groupings are also based on unweighted averages of all relevant countries. In contrast, the global rates shown for different demographic groups are weighted by country populations, meaning that response rates shown for different age groups, sexes and similar categories are reflective of the total populations of all the surveyed countries.

There are also certain ambiguities in the SPI indicators that are almost unavoidable when using cross-country survey data. A number of terms or concepts in the index (for example, risk, mental health, violent crime, etc.) may have slightly different meanings or connotations in different languages or cultural contexts. Attitudes towards these topics and concepts in different countries might also influence the responses given by poll respondents. Furthermore, the terms used to capture the degrees of concern about different risks – that is, “somewhat worried” and “very worried” – do not have precise meanings and may be interpreted differently by respondents.

Despite these limitations, the SPI is a comprehensive and comparable measure of the impact of risk across countries. It can be disaggregated by any of the demographic variables collected by Gallup, allowing for the creation of indices specific to age, sex, income, education and a variety of other characteristics. Future iterations of the index will look to incorporate a broader spectrum of risks.

Appendix - Most commonly cited top risk by country, 2021

Country	Top Risk	Rate	Country	Top Risk	Rate	Country	Top Risk	Rate
Afghanistan	War and terrorism	62.1%	Honduras	Crime and violence	30.6%	Pakistan	Nothing/No risks	17.1%
Albania	Economy: unemployment, high prices, etc.	23.1%	Hong Kong	Personal health (non-COVID-related)	21.6%	Panama	Crime and violence	33.2%
Algeria	COVID-19	34.7%	Hungary	Personal health (non-COVID-related)	24.9%	Paraguay	Crime and violence	38.6%
Argentina	Crime and violence	48.5%	Iceland	Road-related accidents	43.4%	Peru	Crime and violence	37.7%
Armenia	Don't know	39.1%	India	Don't know	29.8%	Philippines	COVID-19	33.0%
Australia	Road-related accidents	31.4%	Indonesia	Road-related accidents	16.5%	Poland	Personal health (non-COVID-related)	15.8%
Austria	Road-related accidents	20.3%	Iran	Economy: unemployment, high prices, etc.	20.4%	Portugal	Road-related accidents	19.9%
Bangladesh	Don't know	35.9%	Iraq	War and terrorism	15.2%	Romania	Don't know	24.1%
Belgium	Road-related accidents	28.1%	Ireland	Road-related accidents	22.3%	Russia	Don't know	17.7%
Benin	Financial: not having enough money	19.8%	Israel	Road-related accidents	23.0%	Saudi Arabia	Nothing/No risks	23.6%
Bolivia	Crime and violence	35.9%	Italy	Road-related accidents	21.0%	Senegal	Don't know	28.4%
Bosnia and Herzegovina	Don't know	31.8%	Jamaica	Don't know	38.5%	Serbia	Personal health (non-COVID-related)	17.5%
Brazil	Crime and violence	41.4%	Japan	Road-related accidents	25.3%	Sierra Leone	Financial: not having enough money	27.9%
Bulgaria	Don't know	20.9%	Jordan	Nothing/No risks	19.4%	Singapore	Nothing/No risks	33.7%
Burkina Faso	War and terrorism	29.9%	Kazakhstan	Don't know	33.3%	Slovakia	Road-related accidents	21.5%
Cambodia	Financial: not having enough money	21.7%	Kenya	Crime and violence	24.7%	Slovenia	Road-related accidents	22.1%
Cameroon	Crime and violence	24.5%	Kosovo	Don't know	22.9%	South Africa	Crime and violence	43.0%
Canada	Road-related accidents	29.4%	Kyrgyzstan	Don't know	24.4%	South Korea	Road-related accidents	25.3%
Chile	Crime and violence	41.8%	Laos	Don't know	43.2%	Spain	Road-related accidents	18.7%
China	N/A	N/A	Latvia	Personal health (non-COVID-related)	27.9%	Sri Lanka	Don't know	20.7%
Colombia	Crime and violence	46.8%	Lebanon	Economy: unemployment, high prices, etc.	24.2%	Sweden	Road-related accidents	24.9%
Democratic Republic of the Congo	Don't know	33.9%	Lithuania	Personal health (non-COVID-related)	33.1%	Switzerland	Road-related accidents	16.4%
Costa Rica	Crime and violence	35.7%	Malaysia	COVID-19	33.7%	Taiwan	Road-related accidents	30.0%
Côte d'Ivoire	Crime and violence	33.7%	Mali	Road-related accidents	20.2%	Tajikistan	Don't know	31.7%

Country	Top Risk	Rate	Country	Top Risk	Rate	Country	Top Risk	Rate
Croatia	Personal health (non-COVID-related)	33.0%	Malta	Road-related accidents	21.5%	Tanzania	Personal health (non-COVID-related)	23.5%
Cyprus	Don't know	20.1%	Mauritius	Crime and violence	26.4%	Thailand	Road-related accidents	19.6%
Czech Republic	Road-related accidents	39.3%	Mexico	Crime and violence	46.3%	Togo	Road-related accidents	29.3%
Denmark	Road-related accidents	23.3%	Moldova	Don't know	22.3%	Tunisia	Crime and violence	19.0%
Dominican Republic	Crime and violence	43.3%	Mongolia	COVID-19	20.0%	Turkey	Crime and violence	16.6%
Ecuador	Crime and violence	49.6%	Morocco	Don't know	22.8%	Uganda	Crime and violence	22.1%
Egypt	Personal health (non-COVID-related)	18.6%	Mozambique	Don't know	41.6%	Ukraine	Personal health (non-COVID-related)	20.2%
El Salvador	Crime and violence	33.9%	Myanmar	Nothing/No risks	39.1%	United Arab Emirates	Nothing/No risks	49.7%
Estonia	Don't know	21.0%	Namibia	Crime and violence	16.1%	United Kingdom	Road-related accidents	15.4%
Finland	Road-related accidents	45.6%	Nepal	Don't know	29.2%	United States	Road-related accidents	29.1%
France	Road-related accidents	17.0%	Netherlands	Road-related accidents	35.3%	Uruguay	Crime and violence	37.0%
Gabon	Crime and violence	30.7%	New Zealand	Road-related accidents	39.1%	Uzbekistan	Nothing/No risks	29.7%
Georgia	Don't know	31.6%	Nicaragua	Don't know	23.1%	Venezuela	Crime and violence	59.7%
Germany	Road-related accidents	22.0%	Nigeria	Crime and violence	24.5%	Vietnam	Personal health (non-COVID-related)	31.1%
Ghana	Road-related accidents	18.7%	North Macedonia	Don't know	16.7%	Zambia	Don't know	26.6%
Greece	Don't know	20.2%	Norway	Road-related accidents	35.5%	Zimbabwe	Crime and violence	21.6%
Guinea	Crime and violence	21.5%						

Source: World Risk Poll; IEP calculations

ENDNOTES

Executive Summary

- 1 Baerg, L., & Bruchmann, K. (2022). "COVID-19 information overload: Intolerance of uncertainty moderates the relationship between frequency of internet searching and fear of COVID-19", 224. *Acta Psychologica*. DOI: 10.1016/j.actpsy.2022.103534.
- 2 Pakpour, A. H., & Griffiths, M. D. (2020). "The fear of COVID-19 and its role in preventive behaviors", 2/1: 58–63. *Journal of Concurrent Disorders*. URL: <http://irep.ntu.ac.uk/id/eprint/39561>; WHO (2022). "COVID-19 pandemic triggers 25% increase in prevalence of anxiety and depression worldwide". Retrieved January 5, 2023, from: <https://www.who.int/news/item/02-03-2022-covid-19-pandemic-triggers-25-increase-in-prevalence-of-anxiety-and-depression-worldwide>.
- 3 This is because the 2019 survey did not include questions on workplace harm experiences and worries that were comparable to the 2021 questions.
- 4 Institute for Economics & Peace. (2022). *Ecological Threat Report 2022: Analysing Ecological Threats, Resilience & Peace*. Sydney: IEP. Retrieved January 5, 2023, from: <https://www.visionofhumanity.org/wp-content/uploads/2022/10/ETR-2022-Web-V1.pdf>.
- 5 The average percentage of people regarding climate change as a very serious threat across all surveyed countries fell by less than 1.5 percentage points, from 50 to 48.6 per cent.
- 6 World Meteorological Organization. (2021). "Climate change indicators and impacts worsened in 2020". Retrieved January 5, 2023, from: <https://public.wmo.int/en/media/press-release/climate-change-indicators-and-impacts-worsened-2020>.

Section 1: Results and Trends

- 1 de Bruijn, E.-J., & Antonides, G. (2022). "Poverty and economic decision making: a review of scarcity theory", 92: 5–37. *Theory and Decision*. DOI: 10.1007/s11238-021-09802-7.
- 2 WHO. (2022). "Mental Health and COVID-19: Early evidence of the pandemic's impact". Retrieved January 5, 2023, from: https://www.who.int/publications/i/item/WHO-2019-nCoV-Sci-Brief-Mental_health-2022.1.
- 3 As the 2019 survey did not ask about worry related workplace harm, the composite 2019 workplace safety score was calculated using 2021 worry rates.
- 4 Institute for Economics & Peace. (2022). *Global Peace Index 2022: Measuring Peace in a Complex World*. Sydney: IEP. Retrieved January 5, 2023, from: <https://www.visionofhumanity.org/wp-content/uploads/2022/06/GPI-2022-web.pdf>; Institute for Economics & Peace. (2022). *Positive Peace Report 2022: Analysing the factors that build, predict and sustain peace*. Sydney: IEP. Retrieved January 5, 2023, from: <https://www.visionofhumanity.org/wp-content/uploads/2022/02/PPR-2022-web-1.pdf>.
- 5 In addition, the Russia and Eurasia region has the lowest first-hand and second-hand harm experience rates of any region; its first-hand harm experience rate is 3.9 per cent (compared to the global average of 12 per cent) and its second-hand only harm experience rate is 8.8 per cent (compared to the global average of 11 per cent). The overall global average harm experience rate of 22.9 per cent as well as the first-hand and second-hand rates are all weighted by country populations. Unweighted by country populations, the global average rates are 22.3 per cent overall, 8.4 per cent for first-hand experience, and 13.9 per cent for second-hand experience only.
- 6 Out of nine regions, Russia and Eurasia ranks fourth overall in the Safety and Security domain. See: Institute for Economics & Peace. (2022). *Global Peace Index 2022: Measuring Peace in a Complex World*. Sydney: IEP. Retrieved January 5, 2023, from: <https://www.visionofhumanity.org/wp-content/uploads/2022/06/GPI-2022-web.pdf>.
- 7 Institute for Economics & Peace. (2022). *Safety Perceptions Index 2022: Understanding the perceptions and connections of global risk*. Sydney: IEP. Retrieved January 5, 2023, from: <https://www.visionofhumanity.org/wp-content/uploads/2022/06/SPI-2022-web-2.pdf>.
- 8 Dadabaev, T. (2017). "Introduction to Survey Research in Post-Soviet Central Asia: Tasks, Challenges and Frontiers." Dadabaev, T., Ismailov, M., & Tsujinaka, Y., Eds. *Social Capital Construction and Governance in Central Asia*, 29–55. *Politics and History in Central Asia*. New York: Palgrave Macmillan. Retrieved January 5, 2023, from: https://link.springer.com/chapter/10.1057/978-1-137-52233-7_2.
- 9 Kalkavan, B. (2019). "The when and how of climate conflict: The case of Mali", 8/4. *Great Insights magazine*. ECDPM. Retrieved November 10, 2022, from: <https://ecdpm.org/work/the-complex-link-between-climate-change-and-conflict-volume-8-issue-4-autumn-2019/the-when-and-how-of-climate-conflict-the-case-of-mali>.
- 10 Baloch, S. M. (2018). "Why is Pakistan running dry?". *Deutsche Welle*. Retrieved November 10, 2022, from: [https://www.dw.com/en/water-crisis-](https://www.dw.com/en/water-crisis-why-is-pakistan-running-dry/a-44110280)

- 11 why-is-pakistan-running-dry/a-44110280.
- 11 Hifza, R., Fauzia, A., Kiran, A., & Ashraf, M. (2021). *Drinking Water Quality in Pakistan: Current Status and Challenges*. Islamabad: Pakistan Council of Research in Water Resources (PCRWR). Retrieved November 10, 2022, from: <http://pcrwr.gov.pk/wp-content/uploads/2021/10/Drinking-Water-Quality-in-Pakistan-2021.pdf>.
- 12 There were 21 coding categories in 2019 and 25 in 2021. In addition to the inclusion of 'COVID-19' as a possible response, a number of new categories in 2021 resulted from breaking up combined categories in the 2019 survey. For example, "crime, violence and terrorism" represented a single category in 2019 but in 2021 there were two violence-related categories: "crime and violence" and "war and terrorism". Likewise, "climate change, natural disasters or other weather-related events" was a single category in 2019, but in 2021 it was two separate categories: "climate change or severe weather-related events" and "non-weather-related natural disasters".
- 13 Wasim, A., Truong, J., Bakshi, S., & Majid, U. (2022). "A systematic review of fear, stigma, and mental health outcomes of pandemics". *Journal of Mental Health*. DOI: 10.1080/09638237.2022.2091754; Simonelli, G., Petit, D., Delage, J. P., Michaud, X., Lavoie, M. D., Morin, C. M., Godbout, R., Robillard, R., Vallières, A., Carrier, J., & Bastien, C. (2021). "Sleep in times of crises: A scoping review in the early days of the COVID-19 crisis", 60. *Sleep Medicine Reviews*. DOI: 10.1016/j.smr.2021.101545.
- 14 Scudellari, M. (2020). "How the pandemic might play out in 2021 and beyond", 584: 22–25. *Nature*. DOI: 10.1038/d41586-020-02278-5; Stieg, C. (2020). "The psychological toll of uncertainty and not knowing what's coming next". CNBC. Retrieved November 10, 2022, from: <https://www.cnbc.com/2020/05/17/coronavirus-psychology-of-uncertainty-not-knowing-whats-next.html>
- 15 Wasim, A., Truong, J., Bakshi, S., & Majid, U. (2022). "A systematic review of fear, stigma, and mental health outcomes of pandemics". *Journal of Mental Health*. DOI: 10.1080/09638237.2022.2091754.
- 16 Van Aelst, P., Toth, F., Castro, L., Štětka, V., de Vreese, C., Aalberg, T., Cardenal, A. S., Corbu, N., Esser, F., Hopmann, D. N., Koc-Michalska, K., Matthes, J., Schemer, C., Sheaffer, T., Splendore, S., Stanyer, J., Stepińska, A., Strömbäck, J., & Theocharis, Y. (2021). "Does a Crisis Change News Habits? A Comparative Study of the Effects of COVID-19 on News Media Use in 17 European Countries", 9/9: 1208–1238. *Digital Journalism*. DOI: 10.1080/21670811.2021.1943481.
- 17 Heffner, J., Vives, M.-L., & FeldmanHall, O. (2021). "Anxiety, gender, and social media consumption predict COVID-19 emotional distress", 8/140. *Humanities and Social Sciences Communications*. DOI: 10.1057/s41599-021-00816-8; Hammad, M. A., & Alqarni, T. M. (2021). "Psychosocial effects of social media on the Saudi society during the Coronavirus Disease 2019 pandemic: A cross-sectional study", 16/3. *PLOS ONE*. DOI: 10.1371/journal.pone.0248811; Arslan, G., Yildirim, M., & Zangeneh, M. (2022). "Coronavirus Anxiety and Psychological Adjustment in College Students: Exploring the Role of College Belongingness and Social Media Addiction", 20: 1546–1559. *International Journal of Mental Health and Addiction*. DOI: 10.1007/s11469-020-00460-4; de Hoog, N., & Verboon, P. (2020). "Is the news making us unhappy? The influence of daily news exposure on emotional states", 111/2: 157–173. *British Journal of Psychology*. DOI: 10.1111/bjop.12389.
- 18 Although a total of 141 countries were surveyed in 2019, the 2019 figures listed here are only in reference to the 119 countries that were surveyed in both 2019 and 2021.

Section 2: Understanding Risk

- 1 Corrigan, P. W., & Rao, D. (2012). "On the Self-Stigma of Mental Illness: Stages, Disclosure, and Strategies for Change", 57/8: 464–469. *Canadian Journal of Psychiatry*. DOI: 10.1177/070674371205700804.
- 2 Grupe, D. W., & Nitschke, J. B. (2013). "Uncertainty and Anticipation in Anxiety", 14/7: 488–501. *Nat Rev Neurosci*. DOI: 10.1038/nrn3524; LaFreniere, L. S., & Newman, M. G. (2019). "The Impact of Uncontrollability Beliefs and Thought-Related Distress on Ecological Momentary Interventions for Generalized Anxiety Disorder: A Moderated Mediation Model", 66. *J Anxiety Disord*. DOI: 10.1016/j.janxdis.2019.102113.
- 3 Altheide, D. L. (2002). *Creating Fear: News and the construction of crisis*. New York: Routledge. Retrieved January 5, 2023, from: <https://www.routledge.com/Creating-Fear-News-and-the-Construction-of-Crisis/Altheide/p/book/9780202306605>.
- 4 Näsi, M., Tanskanen, M., Kivivuori, J., Haara, P., & Reunanen, E. (2020). "Crime News Consumption and Fear of Violence: The Role of Traditional Media, Social Media, and Alternative Information Sources", 67/4. *Crime & Delinquency*. DOI: 10.1177/001128720922539.
- 5 Barnettson, B., & Foster, J. (2015). "If it bleeds, it leads: the construction of workplace injury in Canadian newspapers, 2009–2014", 21/3: 258–265.

International Journal of Occupational and Environmental Health. DOI: 10.1179/2049396715Y.0000000003; Chen, M., & Lawrie, S. (2017).

- "Newspaper depictions of mental and physical health," 41/6: 308–313. *BJPsych Bulletin*. DOI: 10.1192/bp.bp.116.054775; Eklund, M., & Bäckström, M. (2006). "The Role of Perceived Control for the Perception of Health by Patients with Persistent Mental Illness," 13/4: 249–256. *Scandinavian Journal of Occupational Therapy*. DOI: 10.1080/11038120600928823.
- 6 Rathod, S., Pinninti, N., Irfan, M., Gorczynski, P., Rathod, P., Gega, L., & Naeem, F. (2017). "Mental Health Service Provision in Low- and Middle-Income Countries," 10. *Health Services Insights*. DOI: 10.1177/1178632917694350.
- 7 Ray, A. (2017). "Everyday violence during armed conflict: Narratives from Afghanistan," 23/4: 363–371. *Peace and Conflict: Journal of Peace Psychology*. DOI: 10.1037/pac0000281.
- 8 Bruine de Bruin, W. (2020). "Age Differences in COVID-19 Risk Perceptions and Mental Health: Evidence From a National U.S. Survey Conducted in March 2020," 76/2: e24–e29. *The Journals of Gerontology: Series B*. DOI: 10.1093/geronb/gbaa074; Neubauer, A. B., Smyth, J. M., & Sliwinski, M. J. (2019). "Age Differences in Proactive Coping With Minor Hassles in Daily Life," 74/1: 7–16. *J Gerontol B Psychol Sci Soc Sci*. DOI: 10.1093/geronb/gby061.
- 9 Pan American Health Organization. (2012). "Good Health Adds Life to Years." PAHO. Retrieved January 5, 2023, from <https://paho.org/hq/dmdocuments/2012/Disasters-English.pdf>.
- 10 Warr, M. (1984). "Fear of Victimization: Why are Women and the Elderly more afraid?," 65/3: 681–702. *Social Science Quarterly*. URL: <https://www.jstor.org/stable/42861723>.
- 11 Pain, R. (1997). "Social Geographies of Women's Fear of Crime," 22/2: 231–244. *Transactions of the Institute of British Geographers*. URL: <https://www.jstor.org/stable/622311>.
- 12 Priory. (2023). "Men's mental health: 40% of men won't talk about their mental health." Retrieved January 5, 2023, from <http://www.priorygroup.com/blog/40-of-men-wont-talk-to-anyone-about-their-mental-health/>; Oliver, M. I., Pearson, N., Coe, N., & Gunnell, D. (2005). "Help-seeking behaviour in men and women with common mental health problems: Cross-sectional study," 186/4: 297–301. *The British Journal of Psychiatry*. DOI: 10.1192/bjp.186.4.297.

Section 3: Employment and Perceptions of Safety and Wellbeing

- 1 Jin R.L., Shah C.P., & Svoboda T.J. (1985). 'The Impact of Unemployment on Health: A Review of the Evidence.' *CAJ: Canadian Medical Association Journal*. Retrieved November 7, 2022, from <https://www.health.org.uk/evidence-hub/work/employment-and-underemployment/relationship-between-employment-and-health>.
- 2 'How COVID Experiences Will Reshape the Workplace – Harvard Gazette'. Retrieved November 7, 2022, from <https://news.harvard.edu/gazette/story/2021/02/how-covid-experiences-will-reshape-the-workplace/>.
- 3 ILO. (2022). 'ILO Monitor: COVID-19 and the World of Work'. Retrieved November 7, 2022, from https://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/briefingnote/wcms_767028.pdf.
- 4 Kochhar.R. (2021). 'The Pandemic Stalls Growth in the Global Middle Class, Pushes Poverty Up Sharply'. *Pew Research Centre*. Retrieved November 29, 2022, from <https://www.pewresearch.org/global/2021/03/18/the-pandemic-stalls-growth-in-the-global-middle-class-pushes-poverty-up-sharply/>.
- 5 Sanchez-Paramo, C. Hill, R. Mahler, D.G. Narayan, A., & Yonzan, N. (2021). 'COVID-19 Leaves a Legacy of Rising Poverty and Widening Inequality'. Retrieved November 7, 2022, from <https://blogs.worldbank.org/developmenttalk/covid-19-leaves-legacy-rising-poverty-and-widening-inequality>.
- 6 ILO. (2022). 'World Employment and Social Outlook. Trends 2022'. ILO. Retrieved November 28, 2022, from https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_834081.pdf.
- 7 ILO. (2022). 'Recovery in Youth Employment Is Still Lagging, Says ILO'. Retrieved November 2, 2022, from http://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_853078/lang--en/index.htm.
- 8 Kalenkoski, C.M., & Pabilonia, S.W. (2022) 'Impacts of COVID-19 on the Self-Employed'. 58, no. 2: 741-68. *Small Business Economics*. DOI: 10.1007/s11187-021-00522-4.
- 9 Torres, C. D. Warren, T., & Veeken, A. (2021). 'How Is COVID-19 Impacting Women and Men's Working Lives in the UK?' *Nottingham Business School*. Nd.20. Retrieved from <https://www.nottingham.ac.uk/business/documents/research/carrying-the-work-burden-of-covid-19/covid-research-summary.pdf>.
- 10 Parker, K., & Menasce, H. J., (2021). 'Majority of Workers Who Quit a Job in 2021 Cite Low Pay, No Opportunities for Advancement, Feeling Disrespected'. *Pew Research Centre*. Retrieved November 7, 2022, from <https://www.pewresearch.org/fact-tank/2022/03/09/majority-of-workers-who-quit-a-job-in-2021-cite-low-pay-no-opportunities-for-advancement-feeling-disrespected/>.
- 11 Cook, I., (2021). 'Who Is Driving the Great Resignation?' *Harvard Business Review*. Retrieved November 2, 2022, from <https://hbr.org/2021/09/who-is-driving-the-great-resignation>.
- 12 Bandurski, D. (2021). 'The "Lying Flat" Movement Standing in the Way of

- China's Innovation Drive'. *Brookings*. Retrieved November 2, 2022, from <https://www.brookings.edu/techstream/the-lying-flat-movement-standing-in-the-way-of-chinas-innovation-drive/>.
- 13 (2021). 'Five Things to Know about the Informal Economy'. *IMF*. Retrieved November 29, 2022, from <https://www.imf.org/en/News/Articles/2021/07/28/na-072821-five-things-to-know-about-the-informal-economy>.
- 14 ILO. (2022). 'World Employment and Social Outlook. Trends 2022'. ILO. Retrieved November 28, 2022, from https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_834081.pdf.
- 15 ILO. (2022). 'More than 60 per cent of the world's employed population are in the informal economy', ILO. Retrieved November 29, 2022, from https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_627189/lang--en/index.htm.
- 16 UNstats. (2022). 'Decent Work and Economic Growth—SDG Indicators'. Retrieved November 7, 2022, from <https://unstats.un.org/sdgs/report/2022/Goal-08/>; Webb, A., McQuaid, R., & Rand, S. (2020). 'Employment in the Informal Economy: Implications of the COVID-19 Pandemic'. *International Journal of Sociology and Social Policy*. Retrieved November 7, 2022, from <https://www.imf.org/en/Publications/fandd/issues/2020/12/what-is-the-informal-economy-basics>.
- 17 ILO. (2022). "ILO Monitor: COVID-19 and the world of work." Retrieved November 7, 2022 from https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/briefingnote/wcms_859255.pdf.
- 18 IEP (2021). 'Adjusted Net National Income per Capita (Current US\$) Data'. Retrieved November 7, 2022, from <https://data.worldbank.org/indicator/NY.ADJ.NNTY.PC.CD>.
- 19 Vision of Humanity. (2017). 'Do Jobs Really Aid Peace?'. Retrieved November 2, 2022, from <https://www.visionofhumanity.org/jobs-really-aid-peace/>.
- 20 IEP. (2020) 'GPI_2020'. Retrieved 7 November 2022, from https://www.visionofhumanity.org/wp-content/uploads/2020/10/GPI_2020_web.pdf; Cramer, C. (2011). 'Unemployment and Participation in Violence'. *World Development Report*. Retrieved November 7, 2022, from <https://web.worldbank.org/archive/website01306/web/unemployment.html>.
- 21 Guntur, S. (2007) 'Measuring Underemployment: Establishing the Cut-off Point'. *Asian Development Bank*.
- 22 Rain, S. J., Lane, M. I., & Steiner, D.D., (1991) 'A Current Look at the Job Satisfaction/Life Satisfaction Relationship: Review and Future Considerations', 44/3. *Human Relations*: <https://journals.sagepub.com/doi/10.1177/001872679104400305>; Schmitt, N., & Pulakos, D. E. (1985). 'Predicting Job Satisfaction from Life Satisfaction: Is There a General Satisfaction Factor?'. 20/155-67. *International Journal of Psychology: Journal International De Psychologie*. DOI :10.1090/00207598508247729.
- 23 Tait, M. Padgett, M. Y., & Baldwin, T.T. (1989). 'Job and Life Satisfaction: A Reevaluation of the Strength of the Relationship and Gender Effects as a Function of the Date of the Study'. 74/3: 502-507. *Journal of Applied Psychology*. DOI: 10.1037/0021-9010.74.3.502.
- 24 Champoux, E. J., (1981). 'An Exploratory Study of the Role of Job Scope, Need for Achievement, and Social Status in the Relationship between Work and Nonwork'. 65/2: 153-76. *Sociology and Social Research*; Heller, D. Judge, A. T., & Watson, D., (2002). 'The Confounding Role of Personality and Trait Affectivity in the Relationship between Job and Life Satisfaction'. 23/7: 815-835. *Journal of Organised Behaviour*. Retrieved on November 7, 2022 from <https://www.jstor.org/stable/4093635>; Harr, M. J., Russo, M. Sune, A., & Ollier-Malaterre, A. (2014). 'Outcomes of Work–Life Balance on Job Satisfaction, Life Satisfaction and Mental Health: A Study across Seven Cultures'. 85/3: 361-373. *Journal of Vocational Behavior*.
- 25 Brand, E.B., (2015). 'The Far-Reaching Impact of Job Loss and Unemployment'. 41: 359-379. *HHS Public Access*. DOI: 10.1146.
- 26 Lucas, E.R. Clark, E. A., & Georgellis, D. E. (2004) 'Unemployment Alters the Set Point for Life Satisfaction'. 15/1:8-13. *National Library of Medicine*. DOI: 10.111/j.0963-7214.2004.01501002.x.
- 27 Bateman, N., & Ross, M. (2021). 'The Pandemic Hurt Low-Wage Workers the Most—and so Far, the Recovery Has Helped Them the Least'. *Brookings*. Retrieved on November 7, 2022, from <https://www.brookings.edu/research/the-pandemic-hurt-low-wage-workers-the-most-and-so-far-the-recovery-has-helped-them-the-least/>; Bogmans, C. Pescatori, A., & Prifti, E. (2021). 'Four Facts about Soaring Consumer Food Prices'. *IMF*. Retrieved on November 7, 2022, from <https://www.imf.org/en/Blogs/Articles/2021/06/24/four-facts-about-soaring-consumer-food-prices>.
- 28 Lebrasseur A., Fortin-Bédard, N., Lettre, J., Raymond, E., Bussi eres, E., Lapierre, N., Faieta, J., Vincent, C., Duchesne, L., Ouellet, M., Gagnon, E., Tourigny, A., Lamontagne, M., & Routhier, F. (2021). 'Impact of the COVID-19 Pandemic on Older Adults: Rapid Review'. 4/2. *JMIR Aging*. DOI:10.2196/26474.
- 29 Pokhrel, S., & Chhetri, R. (2021). "A Literature Review on Impact of COVID-19 Pandemic on Teaching and Learning". 8/1:133-141. *Higher Education for the Future*. DOI:10.1177/2347631120983481.
- 30 Kumar, P., Kumar, N., Aggarwal, P. Yeap, J. (2021). 'Working in lockdown: the relationship between COVID-19 induced work stressors, job performance, distress, and life satisfaction'. 40/12:6308-6323. *Curr Psychol*.DOI: 10.1007/s12144-021-01567-0; Bakkeli N.Z. (2021). 'Health, work, and contributing

factors on life satisfaction: A study in Norway before and during the COVID-19 pandemic'. 14. *SSM Popul Health*. DOI:10.1016-j.ssmph.2021.100804.

31 Jahoda, M. (1983). 'Employment and Unemployment: A Social-Psychological Analysis'. Cambridge: Cambridge University Press; Dockery, M.A., (2003) Happiness, Life Satisfaction and the Role of Work: Evidence from two Australian Surveys'. Curtin University. Retrieved on November 7, 2022. from https://melbourneinstitute.unimelb.edu.au/assets/documents/hilda-bibliography/working-discussion-research-papers/2001-2004/Dockery_happiness_life_satisfaction.pdf.

32 Wike, R. Simmons, K., (2015). 'Concerns and Priorities in Sub-Saharan Africa'. Pew Research Center's Global Attitudes Project'. Pew Research Centre. Retrieved on November 2, 2022, from <https://www.pewresearch.org/global/2015/09/16/concerns-and-priorities-in-sub-saharan-africa/>.

33 ILO. (2022). "World Employment and Social Outlook". Retrieved November 28, 2022, from https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_834081.pdf.

34 IMF. (2022). 'Europe's Job Retention Schemes Contained Unemployment, But Challenges Remain'. IMF. Retrieved November 11, 2022, from <https://www.imf.org/en/News/Articles/2022/03/30/cf-europe-job-retention-schemes-contained-unemployment>.

Section 4: Traffic and Road Safety

1 In 2021, the most common response was actually not a specific risk but the option "don't know", which was selected by 16.9 per cent of people. Moreover, the second most commonly cited top risk, which in both years related to violence, was a single category ("crime, violence and terrorism") in 2019, but was broken into two categories ("crime and violence" and "war and terrorism") in 2021. Had these two separate categories been counted together in 2021, they would have had a total response rate of 14.3 per cent, meaning they would have ranked higher than road-related risk.

2 Changes in rankings were also in part the result of the fact that the 2021 survey provided 25 total categories of risks, while there were only 20 in 2019.

3 "Traffic Accident Analysis System of Korea." (n.d.) Retrieved October 17, 2022: http://taas.koroad.or.kr/sta/acs/gus/selectPdstnTfcaacd.do?menuid=WEB_KMP_OVT_MVT_TAS_PDT.

4 Google LLC "COVID-19 Community Mobility Reports." Retrieved October 17, 2022: <https://www.google.com/covid19/mobility/>.

5 Vadoros, S., & Papailias, F. (2021). "Empty Streets, Speeding and Motor Vehicle Collisions during Covid-19 Lockdowns: Evidence from Northern Ireland." *MedRxiv*. DOI: 10.1101/2021.01.03.21249173.

6 Doucette, M. L., Tucker, A., Auguste, M. E., Watkins, A., Green, C., Pereira, F. E., Borrup, K. T., et al. (2021). "Initial impact of COVID-19's stay-at-home order on motor vehicle traffic and crash patterns in Connecticut: an interrupted time series analysis.", 27/1: 3-9. *Injury Prevention*. DOI: 10.1136/injuryprev-2020-043945.

7 International Transport Forum. (2021). "Road Safety Annual Report 2021: The Impact of Covid-19", OECD Publishing, Paris. Retrieved October 17, 2022: <https://www.itf-oecd.org/sites/default/files/docs/irtad-road-safety-annual-report-2021.pdf>.

8 Tucker, A., & Marsh, K. L. (2021). "Speeding through the pandemic: Perceptual and psychological factors associated with speeding during the COVID-19 stay-at-home period.", 159: 106225. *Accident Analysis & Prevention*. DOI: 10.1016/j.aap.2021.106225.

9 Katrakazas, C., Michelaraki, E., Sekadakis, M., Ziakopoulos, A., Kontaxi, A., & Yannis, G. (2021). "Identifying the impact of the COVID-19 pandemic on driving behavior using naturalistic driving data and time series forecasting," 78: 189-202. *Journal of Safety Research*. DOI: 10.1016/j.jsr.2021.04.007.

10 Dong, X., Xie, K., & Yang, H. (2022). "How did COVID-19 impact driving behaviors and crash Severity? A multigroup structural equation modelling", 172: 106687. *Accident; Analysis and Prevention*. DOI: 10.1016/j.aap.2022.106687.

11 Paramasivan, K., Subburaj, R., Sharma, V. M., & Sudarsanam, N. (2022). "Relationship between mobility and road traffic injuries during COVID-19 pandemic—The role of attendant factors", 17/5: e0268190. *PLoS ONE*. DOI: 10.1371/journal.pone.0268190.

12 Friedman, A. B., Barfield, D., David, G., Diller, T., Gunnarson, C., Liu, M., Vicidomina, B. V., et al. (2021). "Delayed emergencies: The composition and magnitude of non-respiratory emergency department visits during the COVID-19 pandemic," 2/1: e12349. *Journal of the American College of Emergency Physicians Open*. DOI: 10.1002/emp2.12349.

13 Yasin, Y. J., Alao, D. O., Grivna, M., & Abu-Zidan, F. M. (2021). "Impact of the COVID-19 Pandemic on road traffic collision injury patterns and severity in Al-Ain City, United Arab Emirates," 16/1: 57. *World Journal of Emergency Surgery*. DOI: 10.1186/s13017-021-00401-z.

14 Institute for Economics & Peace. Positive Peace Report 2022: Analysing the factors that build, predict and sustain peace, Sydney, January 2022. Retrieved October 17, 2022: <http://visionofhumanity.org/resources>.

15 World Health Organisation. (n.d.). "10 Facts about road safety," Retrieved October 17, 2022: <https://www.who.int/news-room/facts-in-pictures/detail/road-safety>.

16 Chen, S., Kuhn, M., Prettner, K., & Bloom, D. (2019). "The global macroeconomic burden of road injuries: estimates and projections for 166 countries," 3: e390-8. *The Lancet Planetary Health*. DOI: 10.1016/S2542-5196(19)30170-6.

17 World Health Organisation. (n.d.). "Global status report on road safety 2018." Retrieved October 17, 2022: <https://www.who.int/publications-detail-redirect/9789241565684>.

18 Chen, S., Kuhn, M., Prettner, K., & Bloom, D. (2019). "The global macroeconomic burden of road injuries: estimates and projections for 166 countries," 3: e390-8. *The Lancet Planetary Health*. DOI: 10.1016/S2542-5196(19)30170-6.

19 Global Road Safety Facility. (n.d.). "Mali's Road Safety Country Profile." World Bank Group. Retrieved October 17, 2022. <https://www.roadsafetyfacility.org/country/mali>.

20 The World Bank. (2022). "Current health expenditure (% of GDP) - Mali, World." World Health Organization Global Health Expenditure database. Retrieved October 17, 2022: <https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS?locations=ML-1W>.

21 Al Jazeera. (2020). "At Least 20 Killed as Minibus Collides with Truck in Mali." 27 May. Retrieved October 17, 2022: <https://www.aljazeera.com/news/2020/5/27/at-least-20-killed-as-minibus-collides-with-truck-in-mali>.

22 News24. (2019). "Bumpy Ride for Mali as Protests Persist over Bad Roads." 13 September. Retrieved October 17, 2022: <https://www.news24.com/News24/bumpy-ride-for-mali-as-protests-persist-over-bad-roads-20190911>.

23 VOA News. (2021). "More Than 40 Die in 2-Vehicle Collision in Mali." 5 August. Retrieved October 17, 2022: <https://www.voanews.com/a/africa-more-40-die-2-vehicle-collision-mali/6209183.html>.

24 Williams, A. F. (2003). "Teenage Drivers: Patterns of Risk." 34/1: 5-15. *Journal of Safety Research*. DOI: [https://doi.org/10.1016/S0022-4375\(02\)00075-0](https://doi.org/10.1016/S0022-4375(02)00075-0).

25 Betz, M. E., & Lowenstein, S. R. (2010). "Driving Patterns of Older Adults: Results from the Second Injury Control and Risk Survey." 58/10: 1931-35. *Journal of the American Geriatrics Society*. DOI: <https://doi.org/10.1111/j.1532-5415.2010.03010.x>.

26 Li, G., Braver, E., & Chen, L.-H. (2003). "Fragility versus excessive crash involvement as determinants of high death rates per vehicle-mile of travel among older drivers," 35: 227-35. *Accident; analysis and prevention*. DOI: 10.1016/S0001-4575(01)00107-5.

27 The Global Health Observatory. (2020). "Global Health Estimates 2020: Deaths by Cause, Age, Sex, by Country and by Region, 2000-2019." Geneva, World Health Organisation. Retrieved October 17, 2022: <https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates/ghe-leading-causes-of-death>.

28 Chen, L.-H., Baker, S., Braver, E., & Li, G. (2000). "Carrying passengers as a risk factor for crashes fatal to 16- and 17- year-old drivers," 283: 1578-82. *JAMA: the Journal of the American Medical Association*. DOI: [doi:10.1001/jama.283.12.1578](https://doi.org/10.1001/jama.283.12.1578).

29 Gwyther, H., & Holland, C. (2012). "The effect of age, gender and attitudes on self-regulation in driving." 45: 19-28. *Accident Analysis & Prevention*. DOI: <https://doi.org/10.1016/j.aap.2011.11.022>.

30 McKenna F. P., Waylen A. E., & Burkes M. E. (1998). "Male and Female Drivers, How Different Are They?" AA Foundation for Road Safety Research. Reading, England: University of Reading. Retrieved October 17, 2022: <https://trid.trb.org/view/496586>.

31 "Professional Driver Demographics and Statistics: Number Of Professional Drivers In The US." (2021). Retrieved October 17, 2022: <https://www.zipppia.com/professional-driver-jobs/demographics/>

32 IIHS-HLDI Crash Testing and Highway Safety. (n.d.). Fatality Facts 2020: Males and females. Retrieved November 28, 2022: <https://www.iihs.org/topics/fatality-statistics/detail/males-and-females>.

33 Republic of South Africa. (2021). Women are unequal on the road and in life. Statistics South Africa. Retrieved November 29, 2022: <https://www.statssa.gov.za/?p=15047>.

34 World Health Organization. (2018). "Global Status Report on Road Safety 2018." Geneva. Retrieved October 17, 2022: <https://www.who.int/publications/i/item/9789241565684>.

35 "How are Cars Safer Now Than in 1970? Evolution of Car Safety Features." (2018). Retrieved October 17, 2022: <https://www.buyautoinsurance.com/how-are-cars-safer-now-than-in-1970/>

36 Dyer, E., (2014). "Why Cars Are Safer Than They've Ever Been." 11 September. *Popular Mechanics*. Retrieved October 17, 2022: <https://www.popularmechanics.com/cars/a11201/why-cars-are-safer-than-theyve-ever-been-17194116/>

37 Chen, S., Kuhn, M., Prettner, K., & Bloom, D. (2019). "The global macroeconomic burden of road injuries: estimates and projections for 166 countries," 3: e390-8. *The Lancet Planetary Health*, DOI: 10.1016/S2542-5196(19)30170-6.

38 Mackay, M. (1997). "The Use of Seat Belts: Some Behavioural Considerations." In *Risk-Taking Behavior and Traffic Safety Symposium Proceedings*: 71-82. October 19-22, Chatham MASS, The University of Michigan. <https://doi.org/10.21949/1525474>.

39 World Health Organization. (2018). Global status report on road safety 2018. Geneva. Retrieved October 17, 2022: <https://www.who.int/publications-detail-redirect/9789241565684>.

40 Peden, M. (2004). *World Report on Road Traffic Injury Prevention*. World Health Organisation: Geneva. Retrieved October 17, 2022: <https://www.who.int/publications/i/item/world-report-on-road-traffic-injury-prevention>.

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