4. Water and air quality

Definition and measurement

Data come from the Gallup World Poll. The Gallup World Poll is conducted in over 140 countries around the world based on a common questionnaire. translated into the predominant languages of each country. With few exceptions, all samples are probability based and nationally representative of the resident population aged 15 years and over in the entire country, including rural areas. While this ensures a high degree of comparability across countries, results may be affected by sampling and non-sampling error. Sample sizes vary between around 1 000 and 4 000, depending on the country. The data reported are binary responses to the question "In the city or area where you live, are you satisfied or dissatisfied with the quality of air/ water?". Positive experience data is described in HE3 and infant mortality data in HE2.

Having access to a high quality local environment, measured here in terms of perceptions of air and water quality, is an important part of healthy living. Poor air and water quality can adversely influence both physical and psychological health. There is objective World Health Organisation data on water quality and sanitation, but in most cases OECD countries are at 100% on the quality measures, with little variation. Hence simple perceptions data are used here.

Most citizens across the OECD were satisfied with both their air (Panel A, HE4.1) and water quality (Panel B, HE4.1). The most satisfied countries were the Nordics (Sweden the exception). The least satisfied were in the Mediterranean and Eastern Europe. The relationship between the two local environmental indicators was strongly positive. That is to say, countries where people were satisfied with their local water also tended to be satisfied with their local air.

Satisfaction with air quality was strongly correlated with the proportion of the population reporting complaints regarding other dimensions of the local environment in 21 European OECD countries. In addition to air and water problems, these complaints include noise, lack of green space, litter, and crime and vandalism (Anderson et al., 2009). This relationship suggests air quality may be a reasonable indicator of the general local environment for OECD countries as a whole (relationships with water quality are weaker but still strong).

People in countries with a high satisfaction with water quality reported more positive experiences (HE4.2). A similar relationship holds with air quality. The existence of these relationships supports suggested links between perceived local environmental quality and positive psychological well-being.

Reinforcing this psychological link, satisfaction with water quality and infant mortality, a key objective critical health outcome, were also linked (HE4.3). Infant mortality rates were significantly higher in OECD countries where reported water quality was lower, possibly via linkages with diarrheal diseases. There is a similar but less strong relationship for local reported air quality. The significant relationship of infant mortality to water quality was robust to the exclusion of the new member countries (Chile, Estonia, Israel, and Slovenia) and the high infant mortality OECD countries (Turkey and Mexico).

Further reading

Anderson, R., B. Mikuliç, G. Vermeylen, M. Lyly-Yrjanainen and V. Zigante (2009), Second European Quality of Life Survey, Overview, Eurofound, Office for Official Publications of the European Communities, Luxembourg.

Figure note

All data for HE4.1 for 2010, except Iceland and Norway, 2008, and Korea, Israel, Estonia and South Africa, 2009.

Information on data for Israel: http://dx.doi.org/10.1787/888932315602.

Panel B. Satisfied with air quality, percentage,

2010 or latest year

HE4.1. Nordic countries are the most satisfied with their water and air quality

Panel A. Satisfied with water quality, percentage, 2010 or latest year $(\mbox{$arphi$})$

Denmark 88.0 Austria Iceland 85.2 Switzerland 89.3 95.3 Norway 89.3 Finland 89.7 95.0 95.0 Germany 86.3 94.8 United Kingdom 88.8 94.2 Netherlands 81.5 93.4 Australia 92.3 Luxemboura 85.7 Canada 91.3 84.5 Ireland 90.6 Slovenia 80.2 90.0 90.0 Portugal 85.7 89.5 United States 87.8 Czech Republic 69.0 89.2 89.0 New Zealand 78.1 87.8 Japan Hungary 86.2 83.5 OFCD 86.1 80.9 Slovak Republic 70.4 86.0 Belgium 84.7 74.0 Chile 69.5 84.5 83.9 France 83.6 Sweden 82.7 Korea 81.6 Spain 72.0 80.6 Italy 69.8 Poland 79.6 80.3 677 Mexico 78.0 66.8 Estonia 75.0 Greece 68.7 64.7 64.3 Israel 58.6 64.1 Turkey 72.2 Indonesia 82.1 Brazil 68.2 73.3 China 75.1 70.4 South Africa 73.8 62 7 India 791 Russian Federation 41.9

40

50

HE4.2. Higher water satisfaction goes with higher positive experience

60

50

40

70

100

90

80

Satisfied with water quality, percentage, 2010 or latest year 100 AUT DNK ISL GBR CHE FIN AUS ♦ NOR 95 PRT USA 90 ♦ SVN ◆ HUN SVK 85 FRA BEL CHL KOR ESP ♦ ITA SWE 80 75 70 ◆ MEX 65 GRC 60 60 65 70 75 80 85 55 Positive experience index (%)

Source: Gallup World Poll (www.gallup.com).

HE4.3. Countries with lower satisfaction with water quality have a higher infant mortality

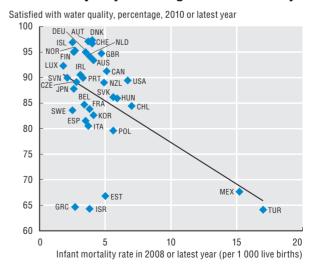
70

80

90

100

60



StatLink http://dx.doi.org/10.1787/888932382026



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