

## Navigating the news

### Spotting fake news and trusting sources

In an age where information is constantly at our fingertips, the ability to distinguish between reliable news and misleading or false information has become increasingly important. With the overwhelming volume of news available across various platforms—be it online, in newspapers, or on social media—developing the skills to critically assess the trustworthiness of these sources is essential.

Enhancing critical thinking, enabling individuals to effectively evaluate the credibility of the news they encounter has become crucial in our society. We need to identify the importance of fact-checking as a crucial part of our daily information consumption, helping to ensure that the information we rely on is accurate and reliable. This helps us to navigate the complex media landscape with greater confidence, making informed decisions and avoiding the pitfalls of misinformation.

#### Overview “Navigating the news”

#### Working question

How can we identify the reliability of news and avoid misinformation in a world full of information?

#### Context

Everyday life  
Citizenship

#### Cognitive processes

Managing situations  
Analysing situations  
Problem solving  
Critical thinking

#### Target group (incl. necessary prior skills and competences)

Adults and young adults with basic understanding of statistics and data analysis and interested in evaluating news and information.

#### Outcomes and results

Learners are aware of the danger of misinformation and critically evaluate news and information. Learners deepen their understanding of statistics and data analysis. They apply mathematical concepts to assess the credibility of information and recognize data manipulation.

#### Dispositions

Self-confidence  
Affection  
Beliefs

#### Content

Pattern, relationship and change  
Data and change



Main information	
Content	Quantity and number Statistics and pictorial representations Percentages Interpreting data
Target group	Adults and young adults with basic understanding of statistics and data analysis and interested in evaluating news and information.
Learning intention	What is the intention of adults to face this problem? <ul style="list-style-type: none"> <li>Numeracy for personal and private purposes</li> </ul>
Duration	Approx. 3 lessons
Material and resources	<ul style="list-style-type: none"> <li>Computer, internet, beamer</li> <li>Handout/presentation on basic concept of fake news (appendix 1)</li> <li>Real-life examples of articles, blogs... (appendix 2)</li> <li>Examples of statistics (appendix 3)</li> <li>Personal smartphones or tablets</li> </ul>
Group size	5 to 10 participants
Problem statement	How can we distinguish reliable news from misinformation in today's world, where information is easily accessible from numerous sources?
Working questions	<ul style="list-style-type: none"> <li>What are the key characteristics that distinguish reliable news sources from unreliable ones?</li> <li>How can we identify bias or manipulation in news articles or reports?</li> <li>What role does fact-checking play in ensuring the accuracy of information?</li> <li>How does the format or presentation of news influence our perception of its reliability and how can we critically analyze this?</li> </ul>
Learning outcomes and results	<p>Learners define key characteristics of fake news and identify them in a text or diagram/statistics.</p> <p>Learners can share and discuss personal experiences with fake news.</p> <p>Learners can evaluate the accuracy of statistical data and identify potential misinterpretations.</p> <p>Learners reflect on how knowledge of fake news affects their personal media behavior.</p>



### Working plan

Time (lessons)	Description of content/activities	Material	Methodical and didactic information <sup>1</sup>
15 minutes	<p><b>Activation:</b> Initial Exploration</p> <p>In a warm-up discussion (“What is fake news?” “Have you encountered fake news?”) students share personal experiences or examples.</p>		Questioning
45 minutes	<p><b>Activity:</b> A guide on how to spot fake news</p> <p>The basic concepts of fake news are introduced, focusing on key points (presented on handout or beamer/digiboard).</p> <p>In small groups, the learners analyze a sample news article, blog entry etc regarding the aspects of fake news.</p> <p>Optional: Each group is assigned a different aspect of fake news (e.g. source, author, date) to facilitate the analysis.</p> <p>The findings are shared in plenum followed by a discussion on how these aspects help in identifying fake news.</p>	<p>Handout or presentation – See appendix 1</p> <p>Various real-life examples of articles, blogs etc. – See appendix 2 for examples</p>	<p>Explicit teaching</p> <p>Collaborative learning</p> <p>Multiple exposures</p>
45 minutes	<p><b>Activity:</b> Misleading diagrams</p> <p>The learners are provided with news articles that include misleading and accurate statistical data. The teacher explores an example (or more) together with the learners, identifying potential misuse, misinterpretation.</p> <p>In group or pairs, students critically analyze further statistics and statistical data (given by the teacher or chosen by themselves) and determine if they’re presented accurately. The findings are shared in plenum.</p>	<p>Example of statistics – See appendix 3</p> <p>Further examples of statistical data, computer or tablet, internet</p>	<p>Worked example</p> <p>Questioning</p> <p>Collaborative learning</p> <p>Metacognitive strategies</p>

<sup>1</sup> for description and explanation of kinds of tasks, HITs and other background information please consult the user’s guide



<p>20 minutes or more</p>	<p><b>Transfer:</b> Reflection, application and action</p> <p>The learners are asked to spend 10 minutes on their normal, everyday media consumption on social media channels. In a following discussion, the group analyzes if and to what extent the information on fake news has influenced their media consumption within these 10 minutes. Experiences and reflections are shared within the group of learners.</p> <p>Optional, the teacher can ask the learners to spend 10 minutes more on their social media channels but this time with a very critical mind towards fake news and eventually take screenshots of possible fake news or misleading information.</p>	<p>Personal smart phones or tablets</p>	<p>Metacognitive strategies</p> <p>Feedback</p>
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## Suggestions for the teacher/user

The example presented here should be considered as exemplary and inspirational material presenting a guideline with a high range of possibilities of adapting those suggestions to a specific group of learners or an individual learner with his or her very personal requirements.

In concrete terms, the example “Navigating the news” could be adapted these ways:

- **Individualisation:** The chosen material on articles, blog entries and statistics can provide a high range of complexity and also content, and therefore meet the learners’ prior skills but also interests.
- **Further or additional material or tasks:**
  - Using videos from social media to identify fake news or representation makes the lessons more practical and enhances the learners’ media literacy, especially dealing with audiovisual content
  - Have learners individually reflect on their personal media consumption habits and keep a digital journal where they also document examples of fake news and fake or misleading videos.
- **Dispositions taken into account:** The teacher must be aware of the fact that especially the news consumption on social media channels represents an essential, even vital, activity for many learners, especially for younger learners. It is therefore important to be sensitive and not to stigmatize this kind of media consumption. Learners need to feel comfortable in this instructional unit in order to genuinely and critically analyze their consumption.

Our educational activities aim at numeracy skills being not only memorized, but first of all being practiced and functionally used by the learners in daily life or/and vocational situations. It is therefore recommended to implement the idea of HITS<sup>2</sup> (higher impacts of teaching skills) as far and often as possible: ...

- ... work with concrete and authentic material that learners will recognize from everyday life situations.
- ... ask the learners questions and let them raise questions themselves. It can be crucial to discuss numeracy themes, contexts and numbers.
- ... think of possible ways of transfer: A fruitful transfer of this learning unit is in any case a critical reflection of the individual behavior and daily routine of the learner.

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<sup>2</sup> for description and explanation of kinds of tasks, HITs and other background information please consult the teacher’s/user’s guide



## Appendix 1

Handout or presentation on spotting fake news

Source: <https://libguides.mdx.ac.uk/MathsStats/FakeNews> [23.08.2024]

Fake news is particularly prevalent on the Internet and especially in social media,  
so it is important to be critical of the information before using it.



- **Source:** Find out more about the site, what is their mission, can you contact the authors. Click away from the story to investigate the site, its mission and contact information.
- **Author:** Is the author credible/trustworthy, what can you find out about them, do they actually exist.
- **Date:** Check the date. Is this an old post that has been reposted? Is it relevant to current events or being reused to cater to some viewpoints/beliefs?
- **Bias:** What prejudices are you bringing to the post? Is it pandering to your beliefs and fueling them? Are you in an information bubble?
- **Headlines:** Don't believe the headlines as often they are being sensationalized to draw you in. This is known as click bait.
- **Evidence:** Is the information based on sound evidence? Can you see where the 'author' got their information from. Do any sources being linked to support what is being said.
- **Joke:** Consider if the news is satire? Is humor, irony, exaggeration, or ridicule being used to expose and criticize people's stupidity or vices, particularly in the context of contemporary politics and other topical issues.
- **Expert:** If in doubt ask an expert, do some further research or consult a fact-checking website such as <https://fullfact.org> - a team of independent fact checkers and campaigners who find, expose and counter the harm fake or incorrect news does.



# HOW TO SPOT FAKE NEWS



## CONSIDER THE SOURCE

Click away from the story to investigate the site, its mission and its contact info.



## READ BEYOND

Headlines can be outrageous in an effort to get clicks. What's the whole story?



## CHECK THE AUTHOR

Do a quick search on the author. Are they credible? Are they real?



## SUPPORTING SOURCES?

Click on those links. Determine if the info given actually supports the story.



## CHECK THE DATE

Reposting old news stories doesn't mean they're relevant to current events.



## IS IT A JOKE?

If it is too outlandish, it might be satire. Research the site and author to be sure.



## CHECK YOUR BIASES

Consider if your own beliefs could affect your judgement.



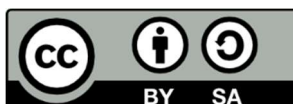
## ASK THE EXPERTS

Ask a librarian, or consult a fact-checking site.



International Federation of Library Associations and Institutions

With thanks to [www.factcheck.org](http://www.factcheck.org)



## Appendix 2

Real-life examples of articles, blogs etc. with (possible) misleading information (examples)

- <https://www.nytimes.com/interactive/2018/09/04/technology/facebook-influence-campaigns-quiz.html> [23.08.2024]
- <https://www.theglobeandmail.com/community/digital-lab/fake-news-quiz-how-to-spot/article33821986/> [23.08.2024]



- <https://www.websiteboosting.com/magazin/70/fake-warum-wir-auf-online-fakes-herineinfallen-und-wie-wir-uns-und-unsere-lieben-davor-schuetzen-koennen.html> [23.08.2024]
- <https://www.mimikama.org/fordern-fluechtlinge-mehr-geld/> [23.08.2024]





## Merkel in „Jewsnews“: „Deutschland wird ein islamischer Staat werden. Die Deutschen müssen sich damit abfinden“

© 21. August 2018 👤 Michael Mannheimer 💬 138



- <https://correctiv.org/fakten-check/2019/02/28/nein-merkel-kuendigte-2010-keinen-islamischen-staat-in-deutschland-an/> [23.08.2024]



EXKLUSIV BUNDESTAG

## AfD-Abgeordneter verschickt per Whatsapp Hitlerbildchen und Hakenkreuzfotos



30.10.2018, 09:43

MERKEN

**Hitler und "Hallo Wien" zu Halloween – der AfD-Bundestagsabgeordnete Stefan Keuter versandte auf Whatsapp eifrig Bilder mit Bezug zum Nationalsozialismus. Das zeigen Recherchen von *stern* und Correctiv. Keuter selbst äußert sich dazu – mit interessanten Stellungnahmen.**

Von Marcus Bensmann und Wigbert Lör

- <https://www.stern.de/politik/deutschland/afd-abgeordneter-keuter-verschickt-hitlerbildchen-und-hakenkreuzfotos-8423446.html> [23.08.2024]
- <https://correctiv.org/aktuelles/neue-rechte/2018/10/30/afd-abgeordneter-verschickt-per-whatsapp-hitler-bilder-und-hakenkreuzfotos/> [23.08.2024]



LEBEN

## Für mehr Sicherheit: Konzerte im Happel-Stadion finden künftig ohne Securitys statt

13. August 2024

18



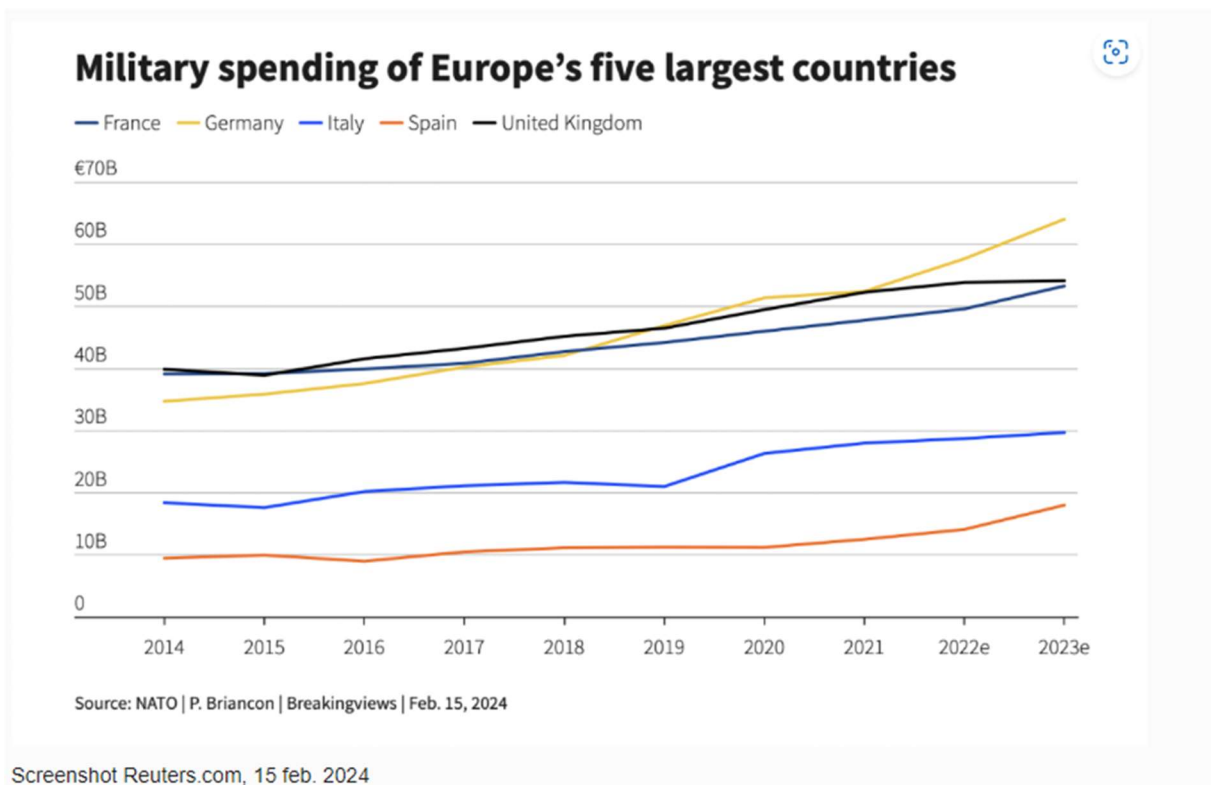
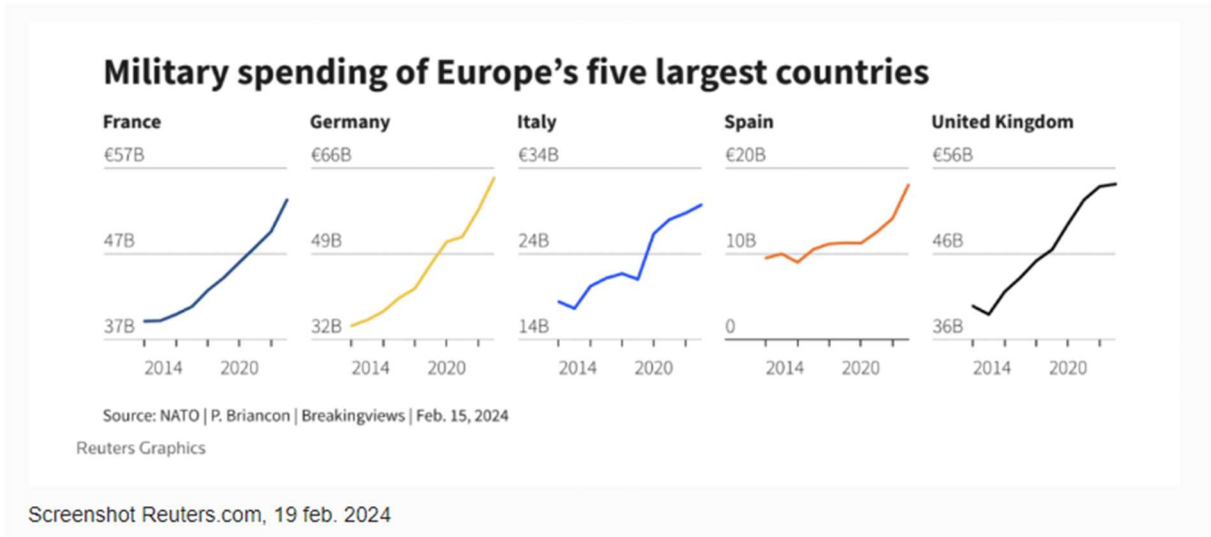
Acht amtsbekannte Personen hätten beim Swift-Konzert als Securitys arbeiten sollen. Aus diesem Anlass überarbeiten die Veranstalter nun ihr Sicherheitskonzept. Um einen sicheren Ablauf für die Gäste zu garantieren, findet das kommende Coldplay-Konzert ganz ohne Securitys statt.

- <https://dietagespresse.com/fuer-mehr-sicherheit-konzerte-im-happel-stadion-finden-kuenftig-ohne-securitys-statt/> [23.08.2024]

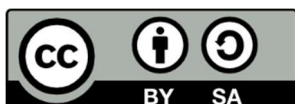


Appendix 3

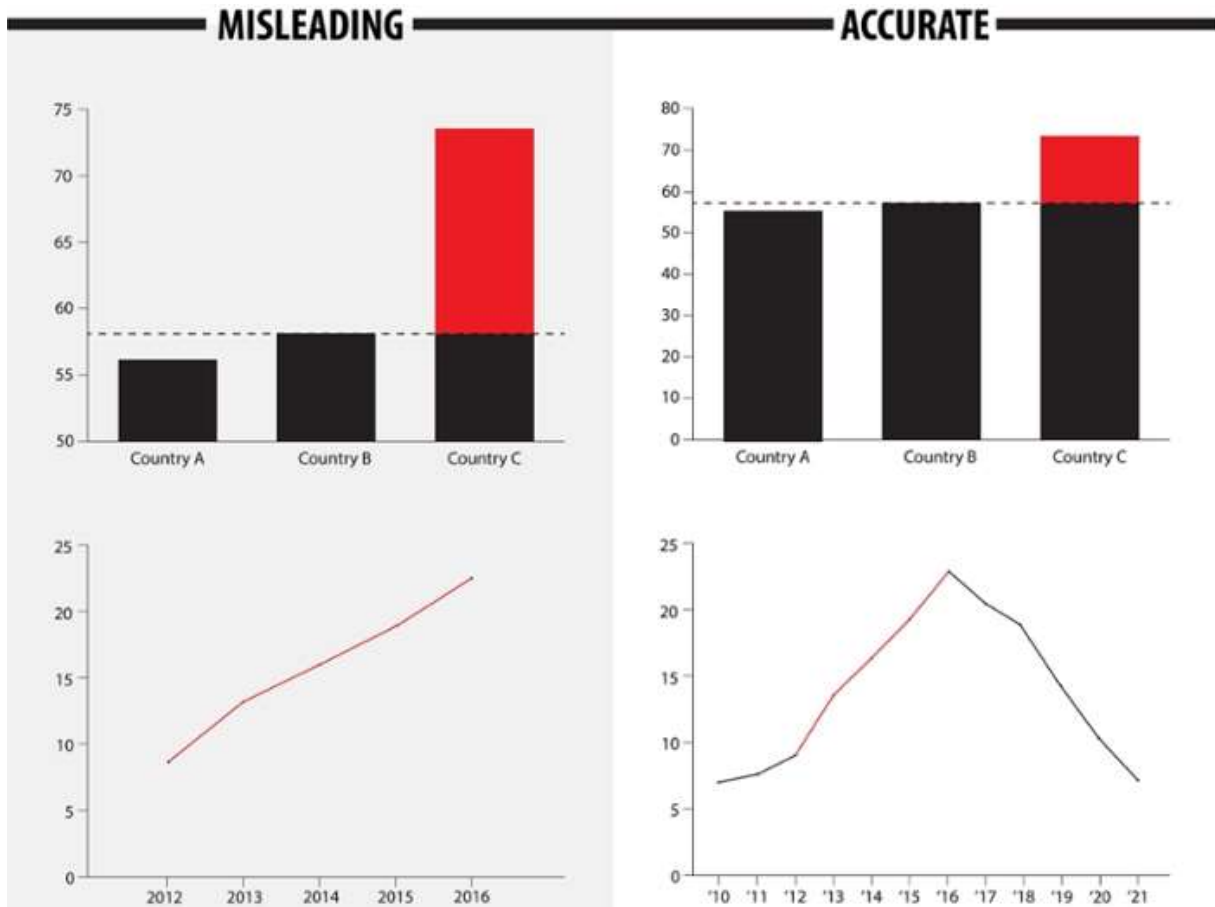
Examples of statistics with accurate or misleading statistical data representation



<https://nieuwscheckers.nl/grafiekpolitie-vergelijkt-defensieuitgaven-grote-europese-navo-landen/> [23.08.2024]

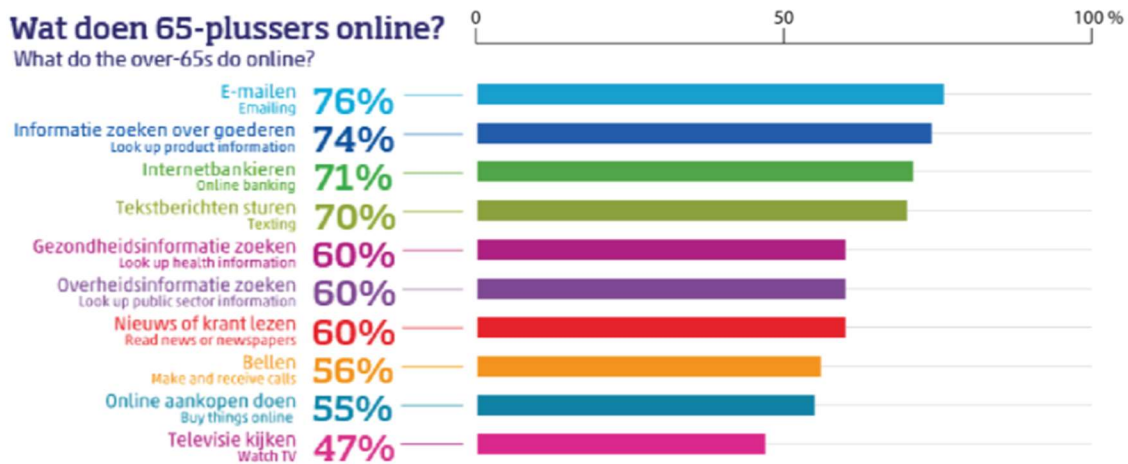
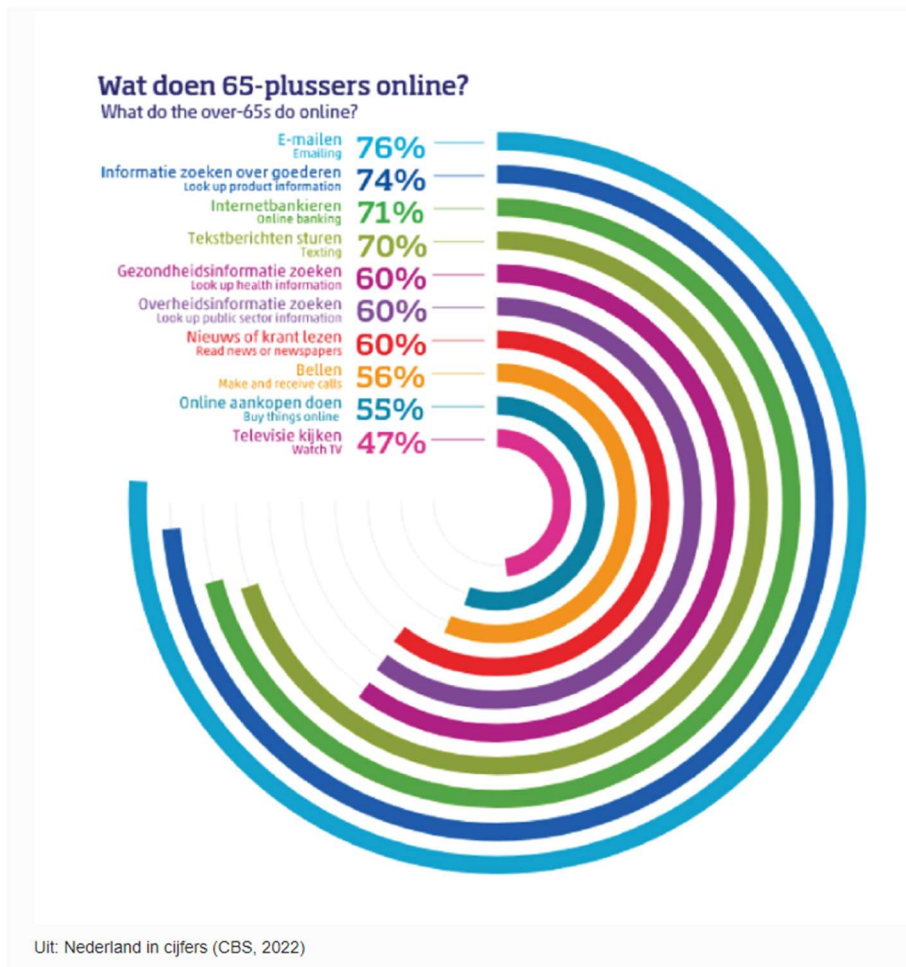


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<https://www.universiteitleiden.nl/en/research/research-projects/science/using-factchecks-to-combat-misleading-graphs> [23.08.2024]





<https://nieuwscheckers.nl/grafiekpolitie-cbs-gebruikt-kromme-grafiek-over-online-gedrag-65-plussers/> [23.08.2024]



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