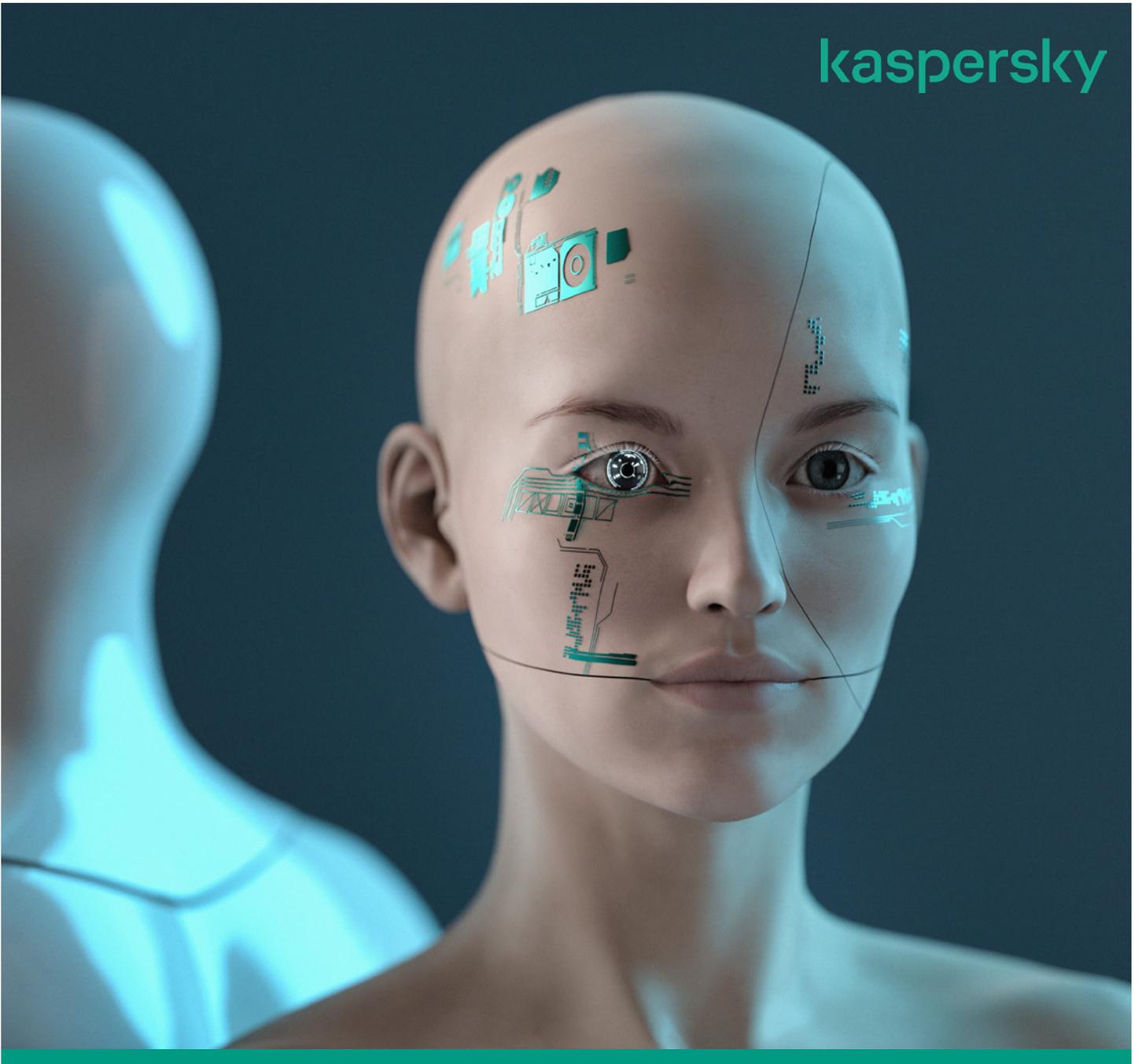


kaspersky



Our bionic future:

What do Europeans think about an augmented world?

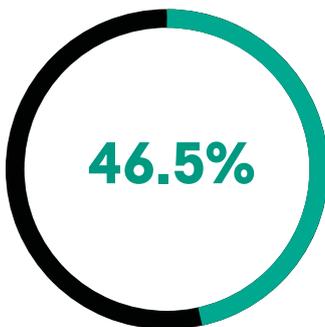
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“Nearly half (**46.5%**) of Europeans believe people are free to augment if they wish, as it's their body.”



Introduction

Kaspersky is continuing its exploration into the future of human augmentation. It is an area of technological development that is receiving an increasing amount of attention but one that is entirely unregulated at present. Once the thing of sci-fi imagination, human augmentation – such as advanced bionic limbs and chips implanted under the skin to perform certain actions – are now an increasing part of everyday life. Whole ‘biohacking’ communities have been created by people choosing to enhance themselves with technology.

Our latest research provides insights into how people in seven European countries feel towards living and working with augmented people. We also sought their thoughts on a future that will probably feature more and more augmented people, both for health grounds, as well as those who have chosen to augment themselves.

These are our key findings:

- Adults in Portugal and Spain are the most accepting of augmented people in Europe
- Nearly half (**46.5%**) of Europeans believe people are free to augment if they wish, as it's their body
- Nearly half (**49%**) of Europeans are either “excited” or “optimistic” about a future society that includes both augmented and non-augmented people. Men are either more optimistic or excited (**50%**) than women (**40%**) about the future of human augmentation
- Less than one in eight (**12%**) Europeans feel augmented people would have an unfair advantage in the workplace
- Two in five (**39%**) Europeans are concerned that human augmentation could lead to future social inequality or conflict
- Nearly half (**45%**) of Europeans would have no problem dating an augmented person, with men (**59%**) narrowly more likely to say the either would date, or have already dated, someone with an augmentation over women (**55%**)



Overview

Kaspersky commissioned research including interviews with 6,500 adults across Austria, France, Germany, Italy, Portugal, Spain and UK in March 2021. The results reinforce the findings of Kaspersky's *The Future of Human Augmentation Report 2020*, which found that countries in Southern Europe are generally more open to human augmentation than those in the north. For example, people in Portugal are more likely to consider dating someone with a technological enhancement (**65%**) compared to the average (**51%**) and are more likely to say that people should be free to do what they want with their body (**56%**) compared to the average (**46%**)

Overall, younger generations are largely more accepting and open to human augmentation and we observe openness drop as age increases. This could be because younger demographics are more tech-savvy already.

Men are significantly more excited or optimistic about human augmentation (**50%**) than women (**40%**), with the widest gender disparity being in the UK, where **46%** of British men are either excited or optimistic compared to just **29%** of women.

How Europeans respond to meeting augmented people

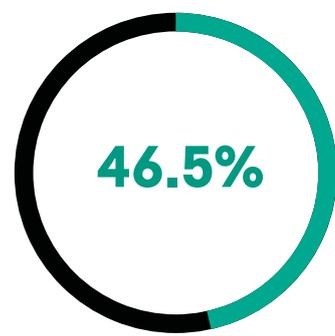
On average, more than half (**51%**) of Europeans say they have met someone with an augmentation. More than a third (**35%**) of Europeans say they have "always been accepting" of augmented people and 17% say they are more accepting now than they were ten years ago.

Overall, nearly half (**49%**) of Europeans are either "excited" or "optimistic" about a future society that includes both augmented and non-augmented people, although just over a quarter (**27%**) feel augmented people need special representation in Government.

"The Future of Human Augmentation Report 2020, which found that countries in Southern Europe are generally more open to human augmentation than those in the north."



"When it comes to voluntary augmentation, nearly half (46.5%) of Europeans believe people can do what they want with their body."



What types of augmentation would Europeans support?

Human augmentation can be required due to health grounds, such as the use of a bionic leg or arm, while some people are choosing to augment themselves, for example, by inserting radio-frequency identification (RFID) chips.

Europeans would be most comfortable if a family member had a bionic arm (38%) or leg (37%), with the UK most accepting if a family member had either of those limbs.

When it comes to voluntary augmentation, nearly half (46.5%) of Europeans believe people can do what they want with their body. Adults in Portugal (56%) and Spain (51%) are most likely to support this view, while just 36% of Britons feel the same. Just 16.5% of European adults believe choosing to augment oneself is "weird", ranging from 30% of Britons to just eight percent of Portuguese. Nearly a quarter (24%) of Europeans view self-augmentation as "brave".

Nearly three in ten (29.5%) Europeans would support a family member who chose to augment themselves, again Portugal ranks highest (46%).

Which of the following augmentations would you feel comfortable with if your partner or family member had one?

	Total	
Total	6,500	100%
Chip in their finger	1,873	29%
Chip in their brain	1,183	18%
Bionic arm	2,510	39%
Bionic leg	2,454	38%
Bionic eye	1,747	27%
Exoskeleton	1,182	18%
None of the above	2,004	31%



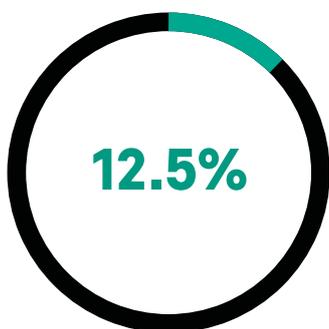
Our shared augmented future

Less than one in eight (**12%**) of European adults say that they would not be happy working alongside an augmented person because they feel they would have an unfair advantage. The vast majority are either neutral or in favour of working with augmented people. Around six in ten Portuguese (**61%**) and Spanish (**59%**) adults report being “happy” to work with augmented people, while the figure falls to around half that number in Austria (**29%**) and France (**30%**).

Nearly four in ten (**39%**) European adults are concerned that an augmented future could lead to either social inequality or conflict.

Given people are ever-more likely to encounter augmented people in their daily lives, how will this impact our personal lives? The vast majority of Europeans would not let an augmentation deter them from dating someone, with just one in eight (**12.5%**) against the idea. Men are marginally more likely to be open to dating – or having already dated – an augmented person (**59%**) compared to women (**55%**). The largest gender disparity is in the UK, where there is a nine-point gap between men and women (**55% v 46%**).

“The vast majority of Europeans would not let an augmentation deter them from dating someone, with just one in eight (**12.5%**) against the idea.”





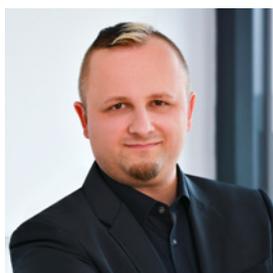
Kaspersky's final thought

About the study

An online survey was conducted by Atomik Research among 6,500 adults aged 18+ across Austria, France, Germany, Italy, Portugal, Spain and UK. The research fieldwork took place between 2-4 March 2021. Atomik Research is an independent creative market research agency that employs MRS-certified researchers and abides to MRS code.

"It's interesting to see how Europeans view human augmentation and interacting with augmented individuals as this will ultimately shape the future of this area of technology. It is clear that the healthcare industry is where the conversation around human augmentation has begun, with therapeutic augmentation being broadly accepted. However, we are beginning to see elective augmentation and the involvement of a broader set of industries including those with less vigorous regulation. As this trend continues, there will be questions that need to be answered in terms how standards are set and who's role it is to ensure safety and security. The concept of being superhuman might sound more like sci-fi but we are edging closer to a reality in which this will be a possibility – we have an opportunity to ensure that this reality is a safe one for all."

"It is important that we take what we are learning about people's perceptions of human augmentation and use this to inform a safer future for this emerging area of technology. Human augmentation is developing rapidly and presents a unique sets of challenges and we cannot afford a lawless data environment to emerge as you could argue it has for the Internet of Things. Industry bodies, manufacturers, innovators and lawmakers must come together now to agree ethics and standards within human augmentation."



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