BEIS Public Attitudes Tracker: Artificial Intelligence Autumn 2021, UK

**16 December 2021**   **Official Statistics**

This report covers the questions asked in the BEIS Public Attitude Tracker on artificial intelligence (AI) in Autumn 2021.

What you need to know about these statistics: This is the first BEIS Public Attitudes Tracker (PAT) wave using the new Address Based Online Survey (ABOS) methodology, which uses random probability sampling. The results should not be compared with previous PAT surveys, which used different data collection methods. For details, see the Technical Overview, Autumn 2021.

Awareness of and attitudes towards AI

In Autumn 2021, nine in ten people (89%) said that they had heard of Artificial Intelligence (AI) (Figure 4.1). Under half (44%) said they knew either a lot (13%) or a fair amount (31%) about AI, while 45% said they knew only a little (31%) or hardly anything (14%).

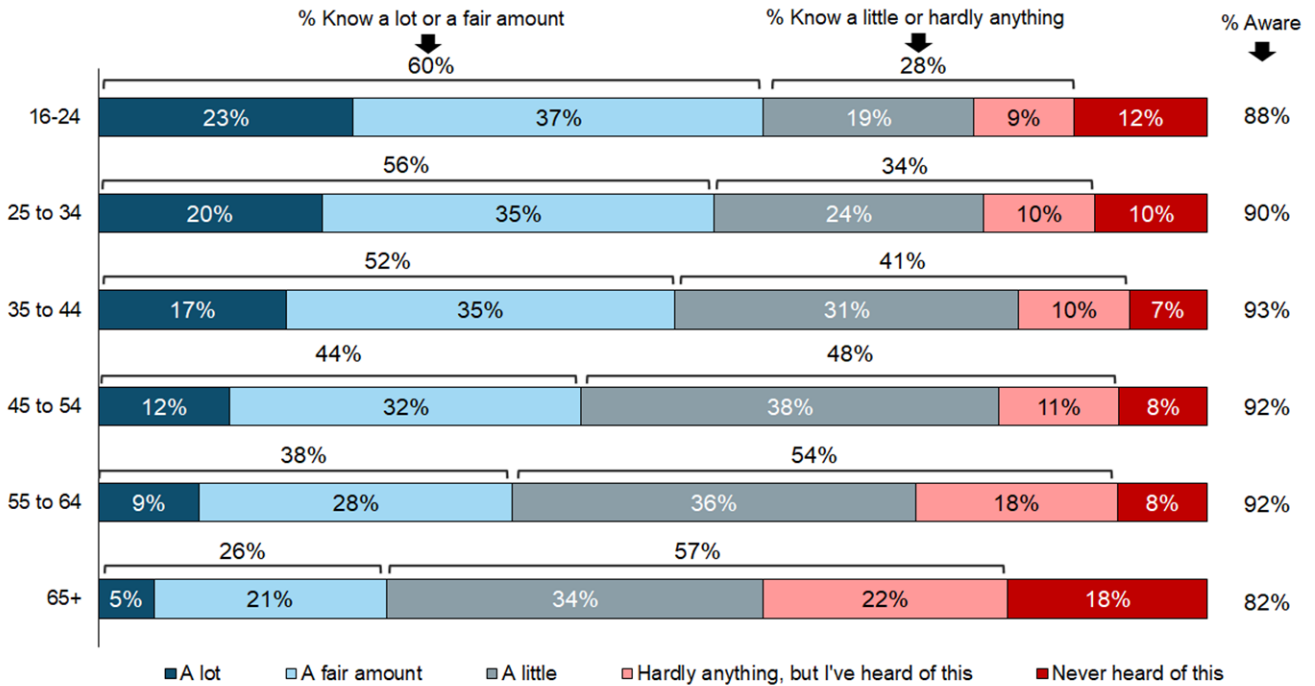**Figure 4.1: Knowledge about AI (based on all people), Autumn 2021**
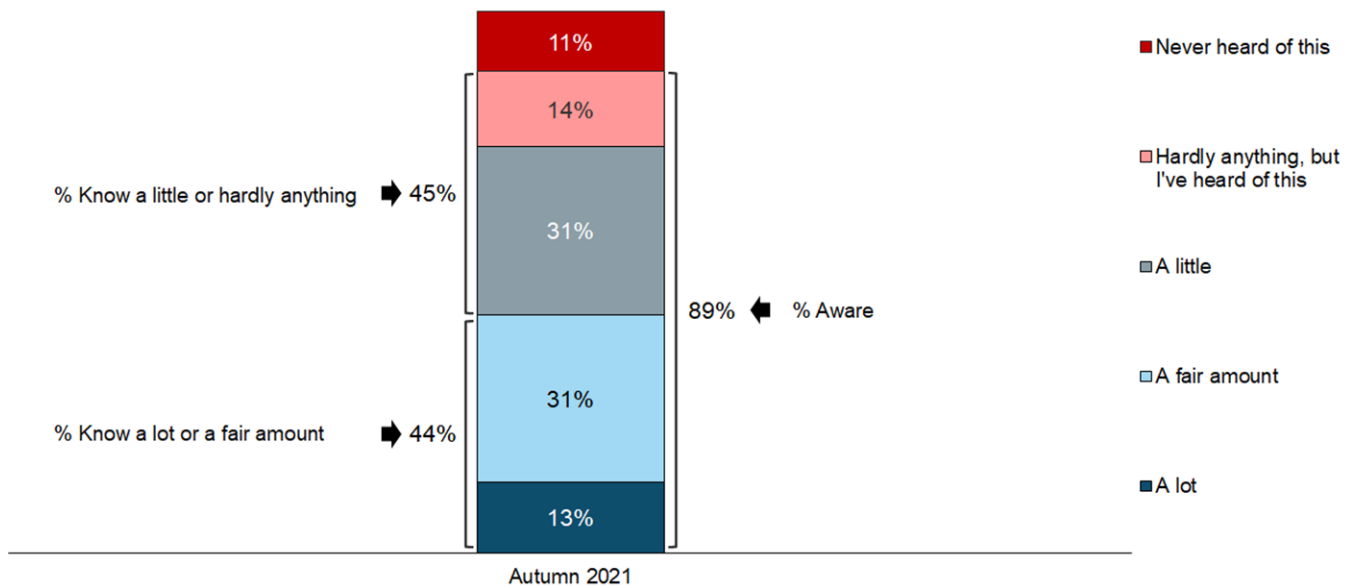
AIKNOW. Before today, how much, if anything, did you know about artificial intelligence, otherwise known as 'AI'? Base: All wave respondents – Autumn 2021 (5,554)

Awareness and knowledge of AI varied by gender, age and education. Men were more likely to say they knew at least a fair amount about AI than women (57% compared with 31%). The overall level of awareness of AI was also higher for people educated to degree level (97% compared to 69% of people with no qualifications).

Overall awareness was lower among those aged 65 and over (82%) compared with those in all other age groups under 65 (92%). While there was relatively little variation in overall awareness of AI under the age of 65, reported knowledge was much higher for younger people compared with older people (see Figure 4.2). Six in ten (60%) of 16 to 24s said they knew at least a fair amount about AI, this figure declining through the age bands to just 26% of those aged 65 or over.

Figure 4.2: Knowledge about AI (based on all people), by age Autumn 2021

AIKNOW. Before today, how much, if anything, did you know about artificial intelligence, otherwise known as 'AI'?
Base: All wave respondents – Autumn 2021: 16 to 24 (331), 25 to 34 (686), 35 to 44 (655), 45 to 54 (774), 55 to 64 (905), 65 or over (2,166)

In Autumn 2021, around three in four people (73%) said they were interested in AI (Figure 4.3). This included 39% of people who said they actively seek out news stories about AI and those who would take an interest in future developments ('engaged'), and 34% who said they were interested but would not make a special effort to keep informed. Overall, 21% in total said they were not interested in AI.

Figure 4.3: Interest in AI (based on all people), Autumn 2021
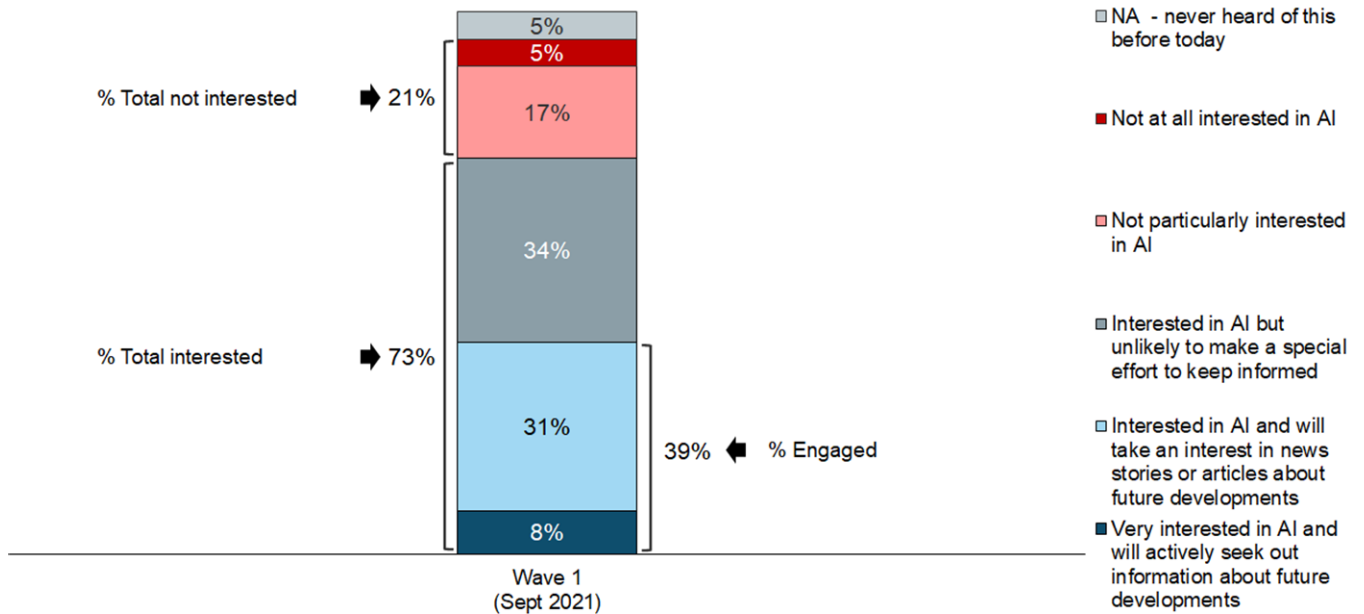
AILEVEL. Which of these statements best describes your level of interest in artificial intelligence?
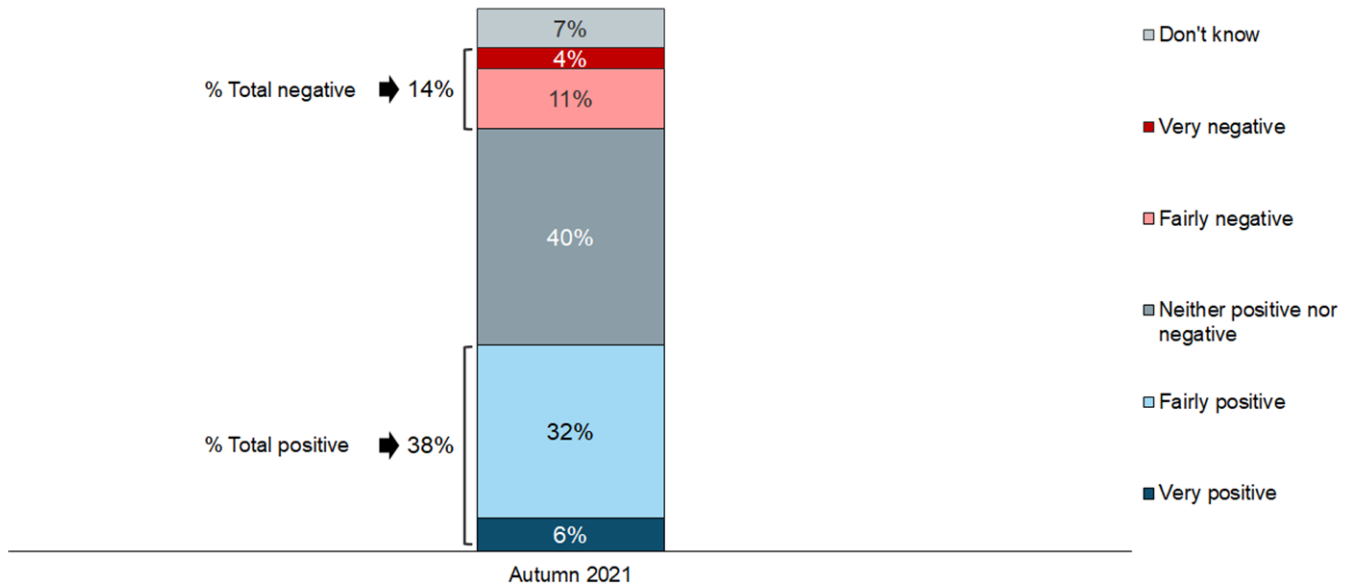Base: All wave respondents – Autumn 2021 (5,554)

Level of interest was clearly related to level of knowledge about AI. Among those who said they knew at least a fair amount about AI before the interview, 91% said they were interested. Conversely, of those who knew only a little or hardly anything about AI, 67% were interested, while among those who had never heard of AI before the interview, 28% were interested.

Men were more likely to report at least some interest in AI (81% compared with 67% of women) and be classified as 'engaged' in this (50% said they would either take an interest in or seek out information on future developments, compared with 29% of women). People aged 65 or over were less likely to be interested in AI (67% compared with 77% of 16 to 44).

The overall level of interest in AI was higher for people educated to degree level (86% compared with 51% of people with no qualifications).

In Autumn 2021, people were on balance more positive than negative about the increasing use of AI in the UK, although only around half (53%) expressed an opinion either way (Figure 4.4). Around four in ten in total were positive (38%), with most people fairly positive (32%) rather than very positive (6%); 14% of people said they felt negative about the increasing use of AI.

Figure 4.4: How positive or negative feel about increasing use of AI in the UK (based on all people), Autumn 2021

AIPOSNEG. Overall, how positive or negative do you feel about the increasing use of artificial intelligence in the UK?
Base: All wave respondents – Autumn 2021 (5,558)

Knowledge of AI was associated with feelings of positivity. Those who said they knew at least a fair amount about AI were more likely to feel positively about it (57%, compared with 25% of those who knew a little or hardly anything, and 16% of those who had not previously heard of AI).

Positivity about AI was highest among men (47% compared with 30% of women), younger people aged 16 to 44 (44% compared with 33% of those aged 45 or over), and people educated to degree level (49% compared with 24% of people with no qualifications).

Attitudes toward specific AI applications

All people interviewed in Autumn 2021 were asked about five applications of AI:

- Computer applications that can recognise speech and answer questions
- Facial recognition applications which can recognise images
- Computer applications that target advertising based on web browsing
- Computer applications which help diagnose patients by analysing medical symptoms and records
- Computer applications that review CVs and help employers decide who to interview

People were asked about their level of awareness and knowledge about each of these. At least 80% had heard of each of these types of applications, with people most aware of facial recognition applications (95%) and least aware of computer applications to help employers review CVs (80%). Over half knew at least a fair amount about facial recognition applications (54%) and those that target web-based advertising (59%) while levels of knowledge of other applications were lower. At the lower end of the scale, only 30% knew at least a fair amount about computer applications to help diagnose medical conditions, and only 28% knew at least a fair amount about computer application that review CVs for job applications. (Figure 4.5).

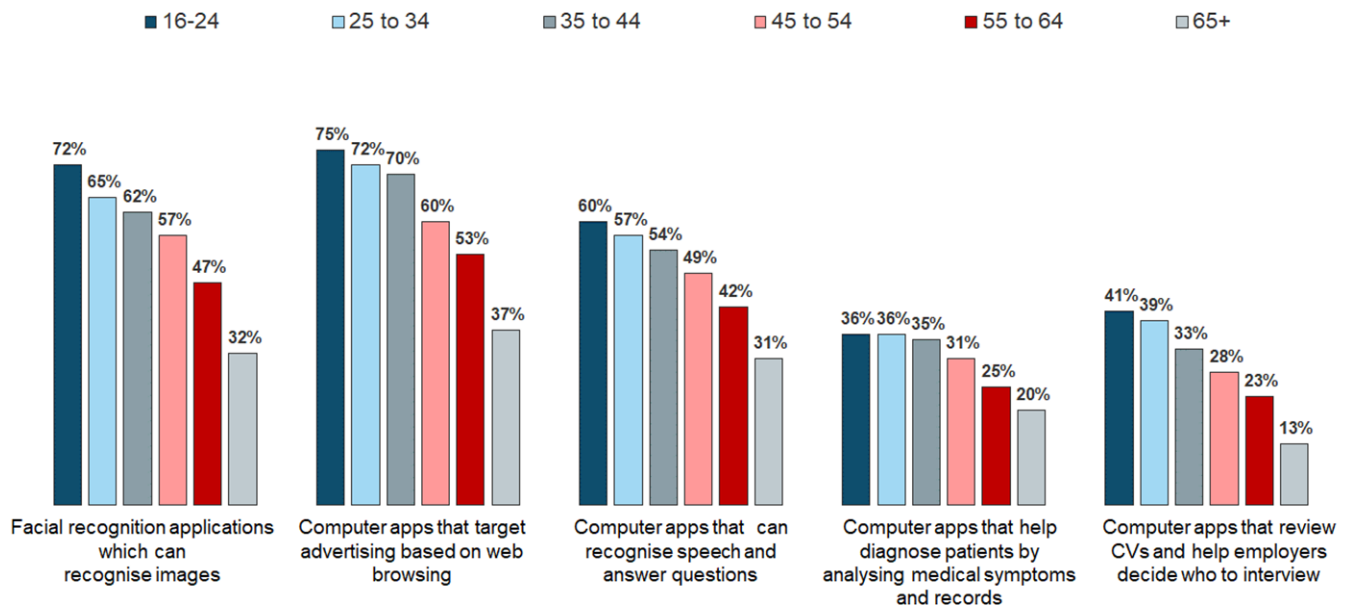**Figure 4.5: Knowledge about AI applications (based on all people), Autumn 2021**
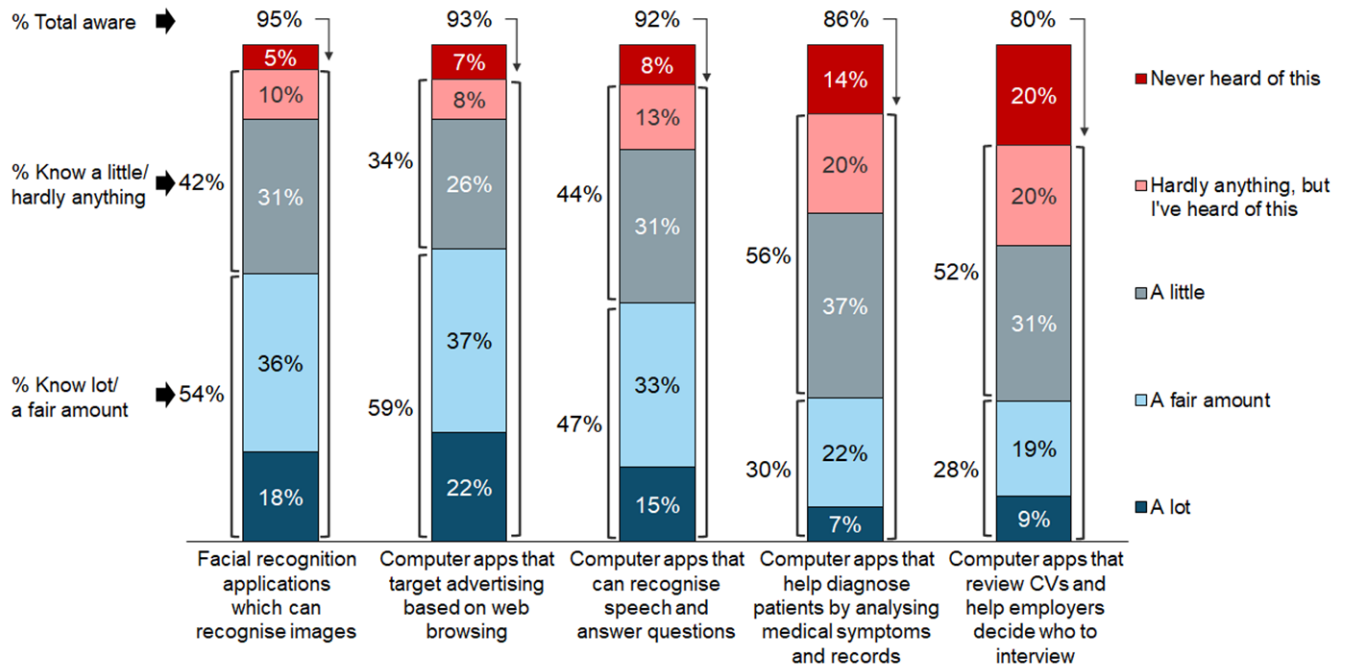
AITYPENOWA-AITYPENOWE. Before today, how much, if anything, did you know about the following applications of artificial intelligence?
Base: All wave respondents – Autumn 2021: Facial recognition (5,528), Advertising (5,520), Speech recognition (5,541), Diagnosis (5,525), CVs (5,528)

Awareness of each application was consistently lower among people aged 65 and over compared with younger people. For example, 97% of those aged 16 to 24 were aware of applications to target advertising compared with 81% of those aged 65 or over, and similar age differences were noted for other types of AI.

In terms of the level of reported knowledge, there were clear differences by age with the proportion who knew at least a fair amount highest among those aged 16 to 24 and lowest among those 65 or over (see Figure 4.6). The age differences between these two extremes were as follows: facial recognition (72% compared with 32%), targeting adverts (75% compared with 37%), speech recognition (60% compared with 31%), medical diagnosis (36% compared with 20%), and reviewing CVs (41% compared with 13%).

Figure 2.6: Know a lot or a fair amount about AI applications (based on all people), by age, Autumn 2021


AITYPENOWA-AITYPENOWE. Before today, how much, if anything, did you know about the following applications of artificial intelligence? (% a lot or a fair amount)
Base: All wave respondents – Autumn 2021: 16 to 24 (332), 25 to 34 (685 to 686), 35 to 44 (653-654), 45 to 54 (774), 55 to 64 (901-904), 65 or over (2,136-2,154): exact number of respondents can vary by application

People were asked to what extent they supported each of the five applications (see Figure 4.7). For three of the applications, people were far more likely to express support than opposition: applications to help medical diagnosis (57% support, 15% oppose); facial recognition applications (57% support, 12% oppose); and speech recognition applications (55% support, 9% oppose).

For applications that review CVs, opinions were more balanced, with 28% saying they support and 32% that they oppose this. However, for applications that target advertising, the level of opposition (47%) far outweighed the level of support (17%).

Figure 4.7: Whether support AI applications (based on all people), Autumn 2021
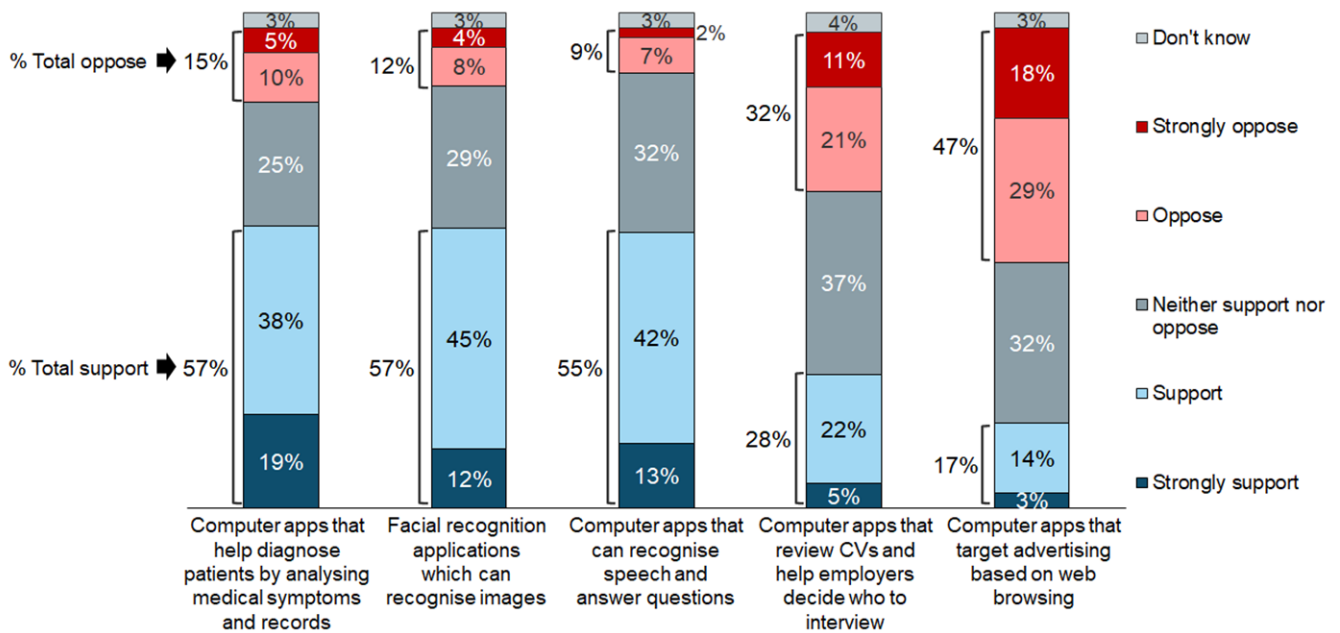
AISUPPORTA-AISUPPORTE. And to what extent do you support or oppose each of the following applications of artificial intelligence?
Base: All wave respondents – Autumn 2021: Diagnosis (5,534), Facial recognition (5,537), Speech recognition (5,542), CVs (5,531), Advertising (5,540)

It is notable that around a quarter to a third of people said they neither supported nor opposed each type of application. This is related to reported levels of knowledge about the application in question. People who said they knew hardly anything or just a little about each application were consistently more likely to give this response, compared with those who knew at least a fair amount.

For most applications, there were relatively small differences in support by gender, although men were more likely to say they supported applications that help medical diagnoses (63% compared with 51% of women).

Additionally, for most applications (with the exception of medical diagnoses where the age-related pattern was less clear), those aged 16 to 34 reported the highest levels of support and those aged 65 and over reported the lowest levels of support.

OGL

This publication is available from: https://www.gov.uk/government/collections/public-attitudes-tracking-survey

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