Artificial Intelligence Literacy and Attitudes: Relations to Age, Gender and Education

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Final Project

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Submission of Thesis and Dissertation

National College of Ireland

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Final Project

Artificial Intelligence Literacy and Attitudes: Relations to Age, Gender and Education

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AI Acknowledgment

This section acknowledges the AI tools that were utilized in the process of completing this assignment.

Tool Name	Brief Description	Link to tool

Description of AI Usage

This section provides a more detailed description of how the AI tools were used in the assignment. It includes information about the prompts given to the AI tool, the responses received, and how these responses were utilized or modified in the assignment. **One table should be used for each tool used**.

[Insert Tool Name]	
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AI LITERACY & ATTITUDES: RELATIONS TO AGE, GENDER & EDUCATION

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Evidence of AI Usage

This section includes evidence of significant prompts and responses used or generated through the AI tool. It should provide a clear understanding of the extent to which the AI tool was used in the assignment. Evidence may be attached via screenshots or text.

Additional Evidence:

[Place evidence here]

Additional Evidence:

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AI LITERACY & ATTITUDES: RELATIONS TO AGE, GENDER & EDUCATION

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Abstract

Background: Artificial intelligence (AI) literacy, AI attitudes and the interaction(s) between

the two are not properly understood. With widespread AI use, this presents a number of

potential problems for researchers and users of AI. Aims: This study aimed to explore the

interaction of age, gender, years of education and AI attitudes with AI literacy.

Methodology: A cross-sectional observational design was used. AI literacy was measured

with the 32 item Artificial Intelligence Literacy Questionnaire (AILQ) and AI attitudes were

measured with the 20 item General Attitudes towards Artificial Intelligence Scale (GAAIS)

which consisted of 2 subscales. The sample consisted of 88 participants. Statistical analysis:

Statistical analysis was performed using IBM SPSS version 29.0. Results: Only AI attitudes

were significantly correlated with AI literacy, AI literacy scores were higher among males

than females and lastly the only significant predictors of AI literacy was AI attitudes.

Conclusion: Positive AI attitudes are among the factors that can contribute towards a greater

ability to use and evaluate AI which are vital skills in current times, so should be promoted

conditionally.

Keywords: AI literacy, AI attitudes, AILQ, GAAIS

Introduction

Thirty-four years ago, it was posited that an artificial intelligence (AI) system would need to be able to synthesize hundreds of thousands of sources of information to properly compare to human intelligence and that the difference between a predictive program and true AI would be the ability to scale and learn from user input (Schank, 1991). Today, with the Internet as a vast source of data and increases in computational power, AI such as the popular GPT models have fulfilled those criteria to a degree (Monteith et al., 2024).

Development of AI began in the 1980s (Lérias et al., 2024) and has many other applications besides generative AI (GAI). AI is used in conjunction with robotics to perform more automated tasks in factories and to control weather systems and predict plant behaviour in commercial farms (Benotsmane et al., 2019; Kaya, 2025). Machine learning can aid in surgery and infer prognoses from medical imaging, reminiscent of operant conditioning in animals (Lintner, 2024; Levenson et al., 2015). In 2022 roughly a third of companies in the world used AI (Carolus et al., 2023) and AI-assisted writing continues to be adopted (Cardon et al., 2023). Various search engine recommendation functions are powered by AI (Russ et al., 2024). The impact of AI is now multifaceted and no longer a topic of science fiction (Stolpe & Hallström, 2024).

Current AI is computationally powerful and is held in high regard by non-experts, yet many of the warnings of the negative aspects of AI such as cyberspace infiltration and misleading responses and predictions are issued by AI experts (Hedlund & Persson, 2024).

Misconceptions about what AI is and how to properly use it still persist with customers and end users of AI (Bewersdorff et al., 2023; Schank, 1987). AI has been rapidly developed and implemented into many products by large corporations in recent years and often without clear explanation (Schepman & Rodway, 2023) and when coupled with

misrepresentations in the media can cause confusion for researchers and users of AI (Schepman & Rodway, 2020).

Though AI is widely used, the focus of researchers in this field is divided. Some argue for promoting AI literacy among students, as a means of preparing the future workforce with the ability to critically use AI (Cardon et al., 2023; Hornberger et al., 2023). Similarly, others emphasize a need for a basic understanding of AI capabilities and limitations in the general public (Bewersdorff et al., 2023). Much of the literature on AI literacy focuses on improving it in pupils, healthcare occupations or corporate employees (Stein et al., 2024).

In contrast, some researchers focus on AI attitudes as an indicator of acceptance of AI or to inform policies and education programs (Schepman & Rodway, 2020).

AI literacy is a category of digital literacy and is the ability to critically evaluate an AI system and to use it effectively (Laupichler et al., 2024). Numerous scales have been developed to assess AI literacy and AI attitudes (Koch et al., 2024; Lintner, 2024) but less has been done to understand the relationships between the two. AI literacy seems to be the more important construct, though studying AI attitudes is also important to discover directionality and mediation. Age, gender and years of education are also important variables in this area.

AI literacy has been explored in school populations that have received AI literacy education (Ng et al., 2023a; Su & Yang, 2024). It is known that women are disproportionately represented in STEM areas (Cain, 2021). This can affect stereotypes, career paths and digital literacy among genders (Tellhed et al., 2023). However, gender differences are still unclear in relation to AI literacy and attitudes (Busch et al., 2024). The relations to adults' education have not been explored as well as with primary and secondary level students (Stolpe & Hallström, 2024). Past research has been unclear as to whether AI literacy or attitudes is more important, as multiple studies in this area have incorporated

elements of both. A study of 3524 adults found individualism, egalitarianism and risk and technological skepticism to be drivers of AI attitudes but AI experts were more nuanced and supportive of AI (O'Shaughnessy at al., 2023). Rigidity, autonomy and group membership were identified as factors of resistance to AI systems (Freitas et al., 2023). AI attitudes are often measures in limited professional samples (Stein et al., 2024). Regardless, AI attitudes are the most important among the above variables in the development of AI literacy (Lérias et al., 2024).

The Present Study

The study addresses the call of the authors of the AILQ to use the scale with a sample older than secondary education and the consideration of Stein et al. (2024) for AI attitudes to be measured as an abstract technological concept rather than in specific domains by using the GAAIS, because standardised measures of AI literacy and attitudes must become more widespread in this area.

AI attitudes in this study is tied to the chosen GAAIS and therefore refers to both positive attitudes towards AI and forgiving attitudes towards the negative aspects of AI. AI literacy is likewise tied to the AILQ and refers to the ability to use, understand, evaluate and reflect on AI (Ng et al., 2023b). AI attitudes and AI literacy will be used interchangeably with GAAIS scores and AILQ scores respectively hereafter.

This study will focus on AI literacy due to the literature and the fact that AI is a practical tool that requires self-efficacy more than a positive attitude to operate. Also, age, gender and education must be studied alongside AI literacy as AI will have an influence on many people directly and indirectly. Further, a simple analysis must be employed in this novel path of research firstly to clarify the basic relationships among the variables and secondly to establish a base for future research to work from and with.

Therefore this study aims to explore the interaction of age, gender, years of education and AI attitudes with AI literacy. No directional hypotheses will be included due to the exploratory nature of this study. There are 5 research questions: what relationship exists between age and AI literacy, what relationship exists between years of education and AI literacy, what relationship exists between AI attitudes and AI literacy, what gender differences exist in AI literacy scores and what influence do age, gender, years of education and AI attitudes have on AI literacy.

Method

Participants

In accordance with guidelines from Stevens (1996) and Tabachnick and Fidell (2007), at least 15 participants needed to complete the demographic questions and a sample size of more than 82 was needed for the multiple regression analysis, because of the four predictor variables (age, gender, years of education and AI attitude scores).

The sample consisted of 88 participants of which 50 were male (56.8%) and 38 female (43.2%). Participants were recruited in-person and online through convenience and snowball sampling. There were four ways possible ways in which participants could have accessed the Microsoft Forms survey: 12 participants were approached directly, meaning the 66 other participants were likely exposed to the study either by viewing the posters in the researcher's university and library campuses, from introduction by participants or through the link provided through the researcher's WhatsApp account.

Participation was voluntary and there was no reward upon completion. Recruitment began after receiving ethical clearance from the NCI research ethics committee.

Materials

Age, gender and years of education were collected. AI literacy was measured with the AILO, a validated 32 item Likert scale with four factor loadings: affective, behavioural,

cognitive and emotional learning. Each item ranges from 1 (strongly disagree) to 5 (strongly agree). Internal reliability was considered good (0.88) when Ng et al. (2023a) validated their scale and when they subsequently repeated their study with another sample (0.92) Ng et al. (2023b). Cronbach's alpha for the current sample was seemingly excellent at 0.961, although this may indicate redundancy among items. Possible scores range from 32 to 160, with higher scores indicating greater learning in the above 4 domains.

Attitudes towards AI were measured with the General Attitudes towards Artificial Intelligence Scale (GAAIS), a validated 20 item scale. There are 2 subscales, one positive (12 item) and one negative (8 item) that are scored respectively from 1 (strongly disagree) to 5 (strongly agree) and reverse-scored from 1 (strongly agree) to 5 (strongly disagree) (Schepman & Rodway, 2020). Cronbach's alpha values were good for the positive GAAIS (0.85) and for the negative GAAIS (0.82) (Schepman & Rodway, 2023). When tested for the collected sample, Cronbach's alpha for the positive GAAIS was good at 0.88 and for the negative GAAIS was acceptable at 0.79. Possible scores on the positive subscale range from 12 to 110 and higher scores represent more positive attitudes towards AI. The negative subscale scores range from 8 to 40 and higher scores represent more forgiving attitudes towards the negative aspects of AI.

Design

A cross-sectional observational design was employed after receiving ethical clearance from the NCI research ethics committee. Spearman's rank order correlation, Mann-Whitney U Test and a standard multiple regression were used to analyse the data. Statistical analysis was performed using IBM SPSS version 29.0.

Independent variables for Mann-Whitney U Test were males and females and the dependent variable was AILQ scores. For the regression, predictor variables (PV) were age,

gender, years of education and AI attitudes (positive and forgiving) and the criterion variable was AILQ scores.

Procedure

Participants had a choice of whether to paste the link in a search engine browser or to scan the QR code on the poster, both of which brought them to the information page (Appendix A) at the beginning of the Microsoft Forms survey. Once they scrolled down and clicked 'next,' the consent form (Appendix B) appeared where the two boxes are required to be ticked before continuing. After that by clicking 'next' again, participants came to the demographics page (Appendix C) which contains the demographic questions for age, gender and years of education. Participants have the freedom to input whatever numbers or characters they wished for all three variables, but indications for years of education are provided based on the Irish education system.

Participants were required to click 'next' to progress to the page with the AILQ (Appendix D). Due to limitations in the Microsoft Forms creation process, the maximum amount of questions permitted in one block was 20, therefore the 32 item AILQ needed to be visually broken into 20 items followed by 12 items. After clicking 'next' again, the following page displayed the GAAIS (Appendix E), which had 20 items and was visually continuous. (Negative items are marked in Appendix E with an asterisk but were absent for participants). After participants completed these, they progressed to the final page, the debrief sheet (Appendix F), and clicked submit. Participation was then concluded with the submission of their responses.

Each question except 'prefer to self-describe' on the demographics page was required to be completed in order to progress to the next page. Each page required participants to click next before the next page was shown. Mean completion time was 5 minutes and 52 seconds.

Participants who were recruited in-person were told that their responses were anonymised and no personal information outside of their age, gender and years of education was required. They were also told that they could terminate participation at any time by exiting the browser that they had the survey open in. These two statements were also written on the consent form page. Also on the consent form page, participants were made aware that their data would be stored on the researcher's university's (NCI) servers to facilitate validation and replication and were provided a link on the debrief page to learn more about how NCI complies with data protection.

Results

Demographics and Sample Characteristics

The sample consisted of 88 participants of which 50 were male (56.8%) and 38 female (43.2%). Scale scores are seen in Table 1.

Table 1Frequencies for Age, Education, GAAIS and AILQ Scores

Variable	M [95% CI]	SD	Range
Age	26.83	12.77	18-89
Education	17.49	2.24	14-32
Positive GAAIS			
Males	43.54 [42.21, 44.86]	4.67	32-55
Females	42.47 [40.72, 44.22]	5.32	28-56
Negative GAAIS			
Males	29.92 [28.94, 30.89]	3.44	19-39
Females	28.81 [27.14, 30.49]	5.09	17-38
AILQ			
Males	113.52 [108.27, 118.76]	18.44	18-159
Females	107.74 [102.38, 113.09]	16.29	84-154

Note: M and SD are used to represent mean and standard deviation, respectively. Education was measured in years. GAAIS = General Attitudes towards Artificial Intelligence Scale;

AILQ = Artificial Intelligence Literacy Questionnaire.

Preliminary Results and Regression Analysis

The relationships between age, education and GAAIS scores and AI literacy scores were investigated using a Spearman's rank order correlation because age and education were non-normally distributed (Kolmogorov-Smirnov = <.001). There was a weak, positive correlation between age and AILQ scores (r = .12, n = 88, p = > .05), education and AILQ scores (r = .09, n = 88, p = > .05), negative GAAIS and AILQ (r = .21, n = 88, p = < .05) and a strong, positive correlation between the positive GAAIS and AILQ (r = .63, n = 88, p = < .01) that

can be seen in Table 2. Results indicate that both positive and forgiving AI attitudes are associated with AI literacy.

Table 2

Correlations between Age, Education, GAAIS and AILQ Scores

 18**				
48**	_			
.09	.08	_		
.18	.10	.64**	_	
.12	.09	.63**	.21*	_
	.18	.18 .10	.18 .10 .64**	.18 .10 .64** —

Note: *p < .05. ** p < .01.

Due to the sample being non-normally distributed and above 50 (Kolmogorov-Smirnov = <.001) a Mann-Whitney U Test was conducted to determine if there was a difference in AI literacy scores among males (median = 113.5) and females (median = 104.5). The results indicated no significant difference (U = 757.00, Z = -1.63, p = .104) with a small effect size (r = .17), indicating greater scores among males than females.

Finally, a standard multiple regression was conducted to investigate how well age, gender, years of education and AI attitudes predicted AI literacy. The 5 PV shared 49% of variance in AILQ scores (F(5, 82) = 15.54, p = <.001). Only AI attitudes significantly predicted AI literacy. Forgiving attitudes had a negative relationship with AI literacy ($\beta = -.34$). Results are seen in Table 3.

Tolerance and VIF values were in an acceptable range (>.1 and <10 respectively).

Table 3

Predictors of AILQ scores

Variable	R^2	В	SE	β	t	p
	.49***					
Age		.11	.11	.08	.95	.347
Gender		-5.11	2.89	14	-1.77	.08
Education		1.08	.64	.14	1.69	.096
Positive GAAIS		2.95	.37	.83	8.05	<.001
Negative GAAIS		-1.42	.43	34	-3.34	.001

Note: ***p = <.001. R^2 = Variance in AILQ scores explained by the 5 PV. B =

Unstandardised coefficient. SE = Standard error. β = number of standard deviations (SD) that AILQ scores would change due to a 1 SD change in the PV. t = test statistic. p = significance level.

Discussion

The aims of the study were to investigate the associations between age, education and AI literacy, the differences between gender in AI literacy scores and how well age, gender, years of education and AI attitudes predicted AI literacy.

Of the correlations, only the positive GAAIS and negative GAAIS were significantly correlated to AI literacy, suggesting a potent association. Also, males scored greater than females on AILQ and both GAAIS scales, but there was no significant difference in the median scores. In addition, the only significant predictors of AI literacy were the positive and negative GAAIS.

These findings hint at AI literacy among those who have both positive and forgiving attitudes towards AI. The latter association should be taken with caution as non-experts in AI overestimate the capabilities of AI. Furthermore age, gender, years of education and AI

attitudes accounted for 49% of variance in scores, suggesting that there are other variables that can explain AI literacy. Interestingly, though not an aim of the study, males' GAAIS scores had a narrower range than females, however this was the opposite for AILQ scores, suggesting more consistent GAAIS responses for males and more consistent AILQ responses for females.

Studies in this area have been inconsistent with the measures of AI literacy and attitudes and have involved greater samples of hundreds or thousands.

Conclusion

A number of limitations were identified. The first is that upon further inspection the cut off points for high or low scoring for the AILQ were not properly disclosed by the authors, and so future research should clarify the scoring or use other validated scales. Such scales that include interpretability indicators are the Meta AI Literacy Scale (MAILS) and the Scale for the assessment of non-experts' AI literacy (SNAIL) (Carolus et al., 2023; Laupichler et al., 2023; Lintner, 2024). Also, in the AILQ validation paper (Ng et al., 2023a), the authors did not specify the exact cut off point for positive attitudes. This means that higher scores have to be interpreted by the researcher who uses the scale, limiting its usefulness. Another limitation was present with the statistical analysis. As both the positive and negative subscales of the GAAIS were entered into the regression, there may have been overlap in the analysis that could be addressed in future with a singular scale measuring AI attitudes.

Regarding strengths, this study was the first to the author's knowledge that used a simple yet robust design to analyse the basic interactions among age, gender, years of education, AI attitudes and AI literacy, something that was lacking in the literature.

A longitudinal study would provide more meaningful insights into the directionality of these variables, specifically in relation to AI attitudes and AI literacy. Also, theoretically salient variables such as occupation and past experience with AI should be accounted for in future research.

AI attitudes are associated with and predict AI literacy, so education programs should have an emphasis on promoting positive AI attitudes though not to the extent of overshadowing its limited contribution to developing an ability to use and evaluate AI.

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Appendix A

Information Sheet

Project Title

Artificial Intelligence Literacy and Attitudes: Relations to Age, Gender and Education

Invitation

Hello, my name is Michael Diaconu and I am conducting the research study, 'Artificial Intelligence Literacy and Attitudes: Relations to Age, Gender and Education,' as part of my undergraduate degree at National College of Ireland and my supervisor is Dr David Mothersill. You are invited to participate in this study.

Before deciding whether or not to take part, please read this sheet to understand what the research involves. If you have any questions about the information provided, contact me using the details at the end of this sheet. If you know someone who is 18 or over and is interested in the topic, please share this with them.

What Will Happen

You will be asked to provide your age, gender and years of education. After this, you will be presented with two self-report scales, the Artificial Intelligence Literacy Questionnaire (AILQ), followed by the General Attitudes towards Artificial Intelligence Scale (GAAIS), which measure your self-perceived AI literacy and AI attitudes respectively. These topics will be examined to explore current levels of AI literacy and attitudes towards AI among age groups, gender and based on years of education.

Time Commitment

Completion of the whole study will take about 15 minutes, including reading this information sheet, the consent form that follows, and the debrief sheet at the very end. The demographics and scales take about 10 minutes to complete.

Participants' Rights

You have the right to stop being a part of the study at any time without explanation. If you exit at any time out of this browser before clicking submit your data will not be collected. You have the right to have any questions answered, and if you have questions email me before continuing.

Benefits and Risks

There are no known risks for you in this study. However, if you will complete the scales mentioned above, you may gain some insight into your relationship with the concept of AI which can hopefully help you in your interactions with it in life.

Confidentiality

No identifying information about you will be collected, and you are only required to tick boxes. Your anonymised information will be presented in the researcher's dissertation write-up, in a presentation of the findings as part of the researcher's degree to a small group in NCI, and stored on NCI servers in line with NCI's data retention policy. You can learn more about how NCI complies with data protection principles here:

https://ncisupporthub.ncirl.ie/hc/en-ie/articles/4406614299164-Data-Protection-Policy

Your anonymised data will also be uploaded to a secondary data repository to facilitate validation and replication, in line with Open Science best practice and conventions.

Further Information

If you would like to find out about the results of this study, contact me at x22526593@student.ncirl.ie

Appendix B

Consent Form

In agreeing to participate in this research I understand the following:

- The method proposed for this research project has been approved in principle by the Departmental Ethics Committee, which means that the Committee does not have concerns about the procedure itself as detailed by the student. It is, however, the above-named student's responsibility to adhere to ethical guidelines in their dealings with participants and the collection and handling of data.
- If I have any concerns about participation, I understand that I may refuse to participate or withdraw at any stage by exiting my browser.
- I understand that once my participation has ended and I have clicked submit, that I cannot withdraw my
 data as it will be fully anonymised. I can stop being a part of the study at any time without consequence
 by exiting the browser.
- I have been informed as to the general nature of the study and agree voluntarily to participate, and I am
 18 years old or above.
- All data from the study will be treated confidentially. The data from all participants will be compiled, analysed, and submitted in a report to the Psychology Department in the School of Business and presented to a small group in NCI.
- The survey does not require identifiable information such as my name, address, email etc.
- I understand that my data will be retained and managed in accordance with the NCI data retention
 policy and that my anonymised data will be stored on NCI servers in line with NCI's data retention
 policy and may be archived on a secondary data repository, to facilitate validation and replication, in
 line with Open Science best practice and conventions. Your data will not be identifiable at any point.
- At the conclusion of my participation, any questions or concerns I have will be fully addressed.

Please tick this box if you have read, and agree with all of the above information.
Please tick this box to indicate that you are providing informed consent to participate in this study and
are 18 or over.

Appendix C

	Demographics				
What is	What is your age in years?				
What is	s your gender?				
0	Male				
0	Female				

Prefer to self-describe

Non-binary

How many years of education do you have?

14 (Leaving Certificate), 15-18 (Bachelor's degree), 19-21 (Master's degree), 22-28 (PhD)

The value must be a number

Appendix D

Artificial Intelligence Literacy Questionnaire (AILQ)

Artificial Intelligence Literacy Questionnaire (AILQ)

Instructions

Please complete the following scale, indicating your response to each item. There are no right or wrong answers.

Note that artificial intelligence (AI) refers to software that can perform tasks that would usually require human intelligence (popular AI include ChatGPT, Amazon Alexa, Apple's Siri, etc.)

Strongly Disagree Disagree Neutral Agree Strongly Agree

Artificial intelligence is relevant to my everyday life (e.g., personal, work).

Learning AI is interesting.

Learning AI makes my everyday life more meaningful.

I am curious about discovering new AI technologies.

I am confident I will perform well on AI related tasks.

I am confident I will do well on AI related projects.

I believe I can master AI knowledge and skills.

I believe I can earn good grades in AI related assessments.

I can understand AI related resources/tools.

I feel confident that I will do well in AI related tasks.

I will continue to use AI in the future.

I will keep myself updated with the latest AI technologies.

I plan to spend time exploring new features of AI applications in the future.

I actively participate in AI-related learning activities.

I am dedicated to AI-related learning materials.

I often try to explain AI learning materials to my classmates or friends.

I try to work with my classmates to complete AI learning tasks and projects.

I often spend spare time discussing AI with my classmates or friends.

I know what AI is and recall the definitions of AI.

I know how to use AI applications (e.g., Siri, chatbot).

I can compare the differences between AI concepts (e.g., deep learning, machine learning).

I can apply AI applications to solve problems.

I can create AI-driven solutions (e.g., chatbots, robotics) to solve problems.

I can evaluate AI applications and concepts for different situations.

I understand how misuse of AI could result in substantial risk to humans.

I think that AI systems need to be subjected to rigorous testing to ensure they work as expected.

I think that users are responsible for considering AI design and decision processes.

I think that AI systems should benefit everyone, regardless of physical abilities and gender.

I think that users should be made aware of the purpose of the system, how it works and what limitations may be expected.

I think that people should be accountable for using AI systems.

I think that AI systems should meet ethical and legal standards.

I think that AI can be used to help disadvantaged people.

Appendix E

General Attitudes towards Artificial Intelligence Scale (GAAIS)

General Attitudes towards Artificial Intelligence Scale (GAAIS)

Instructions

Please complete the following scale, indicating your response to each item. There are no right or wrong answers.

Note that artificial intelligence (AI) refers to software that can perform tasks that would usually require human intelligence (popular AI include ChatGPT, Amazon Alexa, Apple's Siri, etc.)

Strongly Disagree Disagree Neutral Agree Strongly Agree

For routine transactions, I would rather interact with an artificially intelligent system than with a human.

Artificial intelligence can provide new economic opportunities for this country.

Organisations use artificial intelligence unethically.*

Artificially intelligent systems can help people feel happier.

I am impressed by what artificial intelligence can do.

I think artificially intelligent systems make many errors.*

I am interested in using artificially intelligent systems in my daily life.

I find artificial intelligence sinister.*

Artificial intelligence might take control of people.*

I think artificial intelligence is dangerous.*

Artificial intelligence can have positive impacts on people's wellbeing.

Artificial intelligence is exciting.

An artificially intelligent agent would be better than an employee in many routine jobs.

There are many beneficial applications of artificial intelligence.

I shiver with discomfort when I think about future uses of artificial intelligence.*

Artificially intelligent systems can perform better than humans.

Much of society will benefit from a future full of artificial intelligence.

I would like to use artificial intelligence in my own job.

People like me will suffer if artificial intelligence is used more and more.*

Artificial intelligence is used to spy on people. *

Appendix F

Debrief Sheet

You have now completed the study.

Thank you very much for choosing to take part in this research, entitled 'Artificial Intelligence Literacy and Attitudes: Relations to Age, Gender and Education'. Your time is greatly appreciated. The answers you have provided will contribute to understanding the relationships between AI literacy, attitudes towards AI, age, gender and years of education.

Study Purpose

The aim of the study was to examine the above 5 topics together to provide a more informed view of current levels of AI literacy and attitudes towards AI. It is important to study this area because of the widespread uptake of AI in education settings and workplaces around the world. The future implications of this research may include more and better information campaigns about AI.

Your Participation

You have participated in this survey voluntarily and with no reward upon completion. Your anonymised information will be presented in the researcher's dissertation write-up, in a presentation of the findings as part of the researcher's degree to a small group in NCI, and stored on NCI servers in line with NCI's data retention policy. You can learn more about how NCI complies with data protection principles here:

https://ncisupporthub.ncirl.ie/hc/en-ie/articles/4406614299164-Data-Protection-Policy

Your anonymised data will also be uploaded to a secondary data repository to facilitate validation and replication, in line with Open Science best practice and conventions.

As this has been an online survey and your name or other identifiable information was not collected, it is not possible to delete your responses after you have submitted them. You have the right to withdraw from this study at any time up until the data has been anonymised, meaning until you click the submit button at the end of this sheet.

Additional Information

If you would like additional resources to learn about AI, the following may be of interest:

IBM - https://www.ibm.com/topics/artificial-intelligence

Salesforce - https://www.salesforce.com/artificial-intelligence/what-is-ai

Supports

If you feel distressed after completing this survey, the below supports may help:

Hanover Medical - 01 675 0040

Out of hours Doctor - 1850 224 477 (DDoc) / 01 454 5607 (Dub Doc)

Aware - 1800 804 848

Once again I thank you for your participation, and if you know someone who is 18 or over and is interested in the topic, please share this study with them. If you have queries, or would like to find out about the results of this study, please contact me or my supervisor:

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Undergraduate student

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National College of Ireland

Appendix G

Recruitment Poster A Research Study

National College of Ireland

This study examines the relationships between AI literacy, AI attitudes, age, gender and years of education

Are you interested in Artificial Intelligence?

Are you at least 18 years old?

Do you have a computer*, and an internet connection?

Do you have 15 minutes?

If your answers to all the questions on this sheet are yes, and you want to participate in this study, please paste the link below in your computer web browser, or alternatively scan the QR code.

There is no reward for your participation.



If you know someone who is 18 or over and might be interested in this topic, please share this study with them.

https://forms.office.com/e/ikpSbHqHeC

*For the best experience, it is advisable to use a large screen