#### Informed Consent Form

The following information is provided to inform you about the research project and your participation in it. Your participation is voluntary. You are free to withdraw at any time prior to submitting the survey.

- **1. Why we are doing this study:** We are studying cybersecurity and anxiety. This page will give you important information to help you decide if you want to participate. Use the contact information on this form to ask questions. Contact us if you have questions. The contact information can be found below.
- **2. What you will have to do:** You will be asked to take a survey that takes about 15-20 minutes but no more than 25 minutes.
- 3. Costs: There are no expected costs for your participation.
- **4. Discomforts, inconveniences, and/or risks:** There are no expected physical discomforts or risks when participating in this study, beyond normal daily tasks. We will keep your information private. The survey might induce negative thoughts.
- **5. Anticipated benefits:** There are no direct benefits to you. Your answers will help us learn more about cybersecurity and how people use IT.
- **6. Compensation:** You will get 3£ for your taking part in this study.
- **7. Circumstances for withdrawal:** If your answers are inconsistent, we might remove your results from the study.
- **8. How to withdraw:** You may withdraw from the study at any time before you submit the survey by not finishing it. In that case, the data you have entered will not be used and be deleted instead.
- **9. Contact Information:** This study is run by \_\_\_\_ in the \_\_\_\_. Contact \_\_\_\_ if you have any questions.
- **10. Confidentiality:** All efforts will be made to keep the personal information in your research record private. We will store the collected data on password protected, secure computers and use secure data transfer practices. We will also analyze data without identifiers (such as your Prolific ID). If the results are reported in journals or at scientific meetings, no participants will be identified. All analytic results will be presented in aggregate. Complete privacy cannot be promised.

11. Information on processing of data: In relation to the project Development of a Cybersecurity Anxiety Scale, the wants to process personal data regarding you is responsible for the processing of these personal data and therefore obliges to inform you about this process. It is voluntary to participate in the project and the collection will be conducted by SurveyXact. If you have any questions to the study or the processing of your personal data, you can at any time reach out to us. The contact information of the project responsible will be found underneath.						
Personal data processed						
Age, gender, hispanic origin, ethnicity, household income, highest level of education.						
The purpose of the processing  This study investigates and emotions towards cybersecurity of people using the Internet. In particular anxiety is of interest in this study.						
Legal basis  The processing will be conducted in compliance with the rules of The Protection Act § 10 (1) and General Data Protection Regulation art. 6 (1), litra e is responsible for the processing of your personal data and will store these confidentially – in compliance with binding precedent. The personal data will only be used for the purpose described above and will not be accessible for extraneous.						
After the termination of the project <b>31-06-2025</b> and a period to ensure compliance with the principles of documentation and scientific practice, your personal data will be deleted or anonymized when we no longer have the need to store them in identifiable form. If data from the project is accessed as worthy of preservation, the data may be handed over to the National Archives.						
Redress  If you wish to complain about the processing of data, you must address the Data Protection Agency on If you have any questions in regard to data protection and your rights, you can adress our Data Protection Officer, at						
Contact Information						
Project Responsible						
Project Responsible						

<b>12. Use of Data in Future Studies:</b> We will create an anonymized dataset of responses. This dataset can be used by this research team or other researchers without additional informed consent to replicate or reproduce the results of this study. This data set will not contain your Prolific ID.
I am 18 years of age, or older
(1) O Yes
(2) <b>O</b> No
I have read and understand the informed consent
(1) O Yes
(2) O No
I consent to participate in the research and the processing of the data I enter into the survey
(1) O Yes
(2) O No
The following technical terms will be encountered during the survey:
<b>Cybersecurity:</b> The ability to protect or defend the use of cyberspace from cyberattacks.
<b>Cyberspace:</b> The interdependent network of information technology infrastructures that includes the Internet, telecommunications networks, computer systems, and embedded processors and controllers in critical industries.
Cyberattack: Any kind of malicious activity that attempts to collect, disrupt, deny,

degrade, or destroy information system resources or the information itself.

**Technology devices:** Devices such as a computer, laptop, phone, etc.

**Artificial Intelligence (AI):** An engineered or machine-based system that can, for a given set of objectives, generate outputs such as predictions, recommendations, or decisions influencing real or virtual environments. AI systems are designed to operate with varying levels of autonomy.

**Two-factor authentication:** Authentication using two or more factors to achieve authentication. Factors include: (i) something you know (e.g., password/personal identification number [PIN]); (ii) something you have (e.g., cryptographic identification device, token); or (iii) something you are (e.g., biometric).

**Backup:** A copy of files and programs made to facilitate recovery, if necessary.

#### I read and understood the technical terms

(1) **O** Yes

(2) **O** No

If you forgot the meaning of the technical terms, you can look at them here again:

**Cybersecurity:** The ability to protect or defend the use of cyberspace from cyberattacks.

**Cyberspace:** The interdependent network of information technology infrastructures that includes the Internet, telecommunications networks, computer systems, and embedded processors and controllers in critical industries.

**Cyberattack:** Any kind of malicious activity that attempts to collect, disrupt, deny, degrade, or destroy information system resources or the information itself.

**Technology devices:** Devices such as a computer, laptop, phone, etc.

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Backup: A copy of files and programs made to facilitate recovery, if necessary.

The following questions are used for the development of a Cybsersecurity Anxiety Scale. It consists of several statements. Please indicate the degree to which you agree or disagree with each statement. In each case, make your choice in terms of how you feel right now, not what you have felt in the past or would like to feel.

Each item is measured on a 5-point Likert-type agreement scale (1=Strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=Strongly agree). There are no right or wrong answers, so please answers honestly and thoughtfully. Many of the statements are similar to other statements; do not be concerned about this.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I constantly worry about cybersecurity.	(1) •	(2)	(3) • •	(4) <b>O</b>	(5) 🔾
I often worry about the rapid development in technology.	(1) •	(2) •	(3) •	(4) •	(5) •

I am concerned about my cybersecurity vulnerability.	(1) •	(2)	(3) •	(4)	(5) •
I increasingly fear the internet.	(1) <b>O</b>	(2) •	(3) O	(4) •	(5) •
I fear strangers getting access to personal information.	(1) •	(2) •	(3) •	(4) •	(5) •
I feel apprehensive about using e-mail services.	(1) •	(2) •	(3) •	(4)	(5) •
I feel apprehensive about using two-factor authentication.	(1) •	(2) •	(3) •	(4)	(5) •
I regularly review my account login history for unusual activity.	(1) •	(2)	(3) •	(4) •	(5) •
I frequently change my passwords.	(1) •	(2)	(3) •	(4) •	(5) 🔾
I fear being impersonated online.	(1) •	(2) •	(3)	(4)	(5)

I have completed an education in the field of technology or a field related to technology.	(1) •	(2) •	(3) •	(4)	(5) •
Increasing computer usage is changing children's brains for the worse.	(1) •	(2) •	(3) •	(4) •	(5) •
I am up to date with the newest cybersecurity practices.	(1) •	(2) •	(3) •	(4)	(5) O
I spend too much time using technology devices.	(1) O	(2) •	(3) O	(4) •	(5) •
I regularly perform backups.	(1) •	(2) •	(3) •	(4) •	(5) O
I believe artificial intelligence will become dangerous in the future.	(1) O	(2) •	(3) O	(4) •	(5) O
I worry about people editing my social	(1) •	(2) •	(3) O	(4) 🔾	(5) <b>O</b>

media page without my consent.					
I constantly worry about being tracked.	(1) •	(2) •	(3) • •	(4) <b>O</b>	(5) •
I constantly fear losing my online data.	(1) O	(2) •	(3) •	(4) •	(5) 🔾
I fear becoming a victim of cyberbullying.	(1) •	(2)	(3) O	(4) <b>O</b>	(5)
I fear unauthorized access to my social media accounts.	(1) •	(2) •	(3) O	(4) O	(5)
I fear losing access to my accounts containing digital purchases.	(1) •	(2) •	(3) •	(4) <b>O</b>	(5) •
I often fear hackers reading old chat messages of mine.	(1) •	(2)	(3) •	(4) •	(5) •
Theft in real life has prompted me to be more mindful of my	(1) •	(2) •	(3) •	(4)	(5) •

online security risks.					
I am familiar with how someone I know has dealt with a cyberattack and intend to follow their example.	(1) •	(2)	(3) •	(4) •	(5) •
Compared to others, I am more sensitive about the way online companies handle my personal information.	(1) O	(2) •	(3) •	(4) •	(5) O
I fear being impersonated by artificial intelligence.	(1) •	(2)	(3) •	(4)	(5) •
I feel like artificial intelligence makes my education useless.	(1) <b>O</b>	(2)	(3) •	(4) •	(5) •
Please select 'Agree' to show that you are paying attention to this question.	(1) •	(2)	(3) •	(4)	(5) •

Next, you will be asked questions from established scales.

Please indicate the degree to which you agree or disagree with each statement. In each case, make your choice in terms of how you feel **right now**, not what you have felt in the past or would like to feel.

There are no wrong answers.

The following statements are meant to measure the frequency of actions taken to safeguard online security. Please read each statement and indicate the frequency with which you carry out or intend to carry out the action.

	Never	Rarely	Sometime s	Often	Always
I set my computer screen to automatically lock if I don't use it for a prolonged period of time.	(1) <b>Q</b>	(2) •	(3) •	(4) •	(5) •
I use a password/passcode to unlock my laptop or tablet.	(1) •	(2) •	(3) •	(4) •	(5) •
I manually lock my computer screen when I step away from it.	(1) O	(2) •	(3) •	(4) •	(5) •
I use a PIN or	(1) •	(2)	(3)	(4)	(5)

passcode to unlock my mobile phone.					
I do not change my passwords, unless I have to.	(1) <b>O</b>	(2) •	(3) •	(4) •	(5) •
I use different passwords for different accounts that I have.	(1) •	(2)	(3) •	(4)	(5) •
When I create a new online account, I try to use a password that goes beyond the site's minimum requirements.	(1) •	(2) •	(3) O	(4)	(5) •
I do not include special characters in my password if it's not required.	(1) •	(2) •	(3) •	(4)	(5) •
When someone sends me a link, I open it without first verifying where it goes.	(1) •	(2)	(3) • • • • • • • • • • • • • • • • • • •	(4)	(5) •
I know what website I'm visiting based on	(1) •	(2) •	(3) •	(4)	(5) 🔾

its look and feel, rather than by looking at the URL bar.					
I submit information to websites without first verifying that it will be sent securely (e.g., SSL, "https://", a lock icon.)	(1) •	(2) •	(3) •	(4) •	(5) •
When browsing websites, I mouseover links to see where they go, before clicking them.	(1) •	(2)	(3) •	(4) •	(5) O
If I discover a security problem, I continue what I was doing because I assume someone else will fix it.	(1) •	(2) •	(3) •	(4) •	(5) 🔾
When I'm prompted about a software update, I install it right away.	(1) •	(2)	(3) •	(4) <b>O</b>	(5) O
I try to make sure that the programs I use are up-to-date.	(1) •	(2) •	(3) •	(4) •	(5) O

I verify that my anti- virus software has been regularly updating itself.	(1) •	(2) •	(3) (2)	(4)	(5)

Below, we present a series of statements about the use of security practices.

For each, please indicate the degree to which you agree or disagree with each statement. In each case, make your choice in terms of how you feel right now, not what you have felt in the past or would like to feel.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I often am interested in articles about security threats.	(1) O	(2) •	(3) O	(4) <b>O</b>	(5) •
Generally, I diligently follow a routine about security practices.	(1) •	(2) •	(3) •	(4) •	(5)
I seek out opportunities to learn about security measures that are	(1) <b>O</b>	(2) •	(3) •	(4) •	(5) •

relevant to me.					
I always pay attention to experts' advice about the steps I need to take to keep my online data and accounts safe.	(1) •	(2)	(3) •	(4) •	(5)
I am extremely knowledgeable about all the steps needed to keep my online data and accounts safe.	(1) •	(2) •	(3) •	(4) •	(5) O
I am extremely motivated to take all the steps needed to keep my online data and accounts safe.	(1) •	(2)	(3) •	(4) •	(5)

The following questions ask you about your interaction with technical systems. The term 'technical systems' refers to apps and other software applications, as well as entire digital devices (e.g. mobile phone, computer, TV, car navigation).

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I like to occupy myself	(1) •	(2) •	(3) •	(4)	(5) 🔾

in greater detail with technical systems.					
I like testing the functions of new technical systems.	(1) O	(2) •	(3) O	(4) •	(5) •
I predominantly deal with technical systems because I have to.	(1) •	(2) •	(3) •	(4) •	(5) •
When I have a new technical system in front of me, I try it out intensively.	(1) O	(2) •	(3) •	(4) •	(5)
I enjoy spending time becoming acquainted with a new technical system.	(1) O	(2) •	(3) •	(4) •	(5) O
It is enough for me that a technical system works; I don't care how or why.	(1) •	(2)	(3) •	(4)	(5) •
I try to understand how a technical system exactly works.	(1) <b>O</b>	(2) •	(3) O	(4) •	(5) •

It is enough for me to know the basic functions of a technical system.	(1) •	(2)	(3)	(4)	(5) •
I try to make full use of the capabilities of a technical system.	(1) •	(2) •	(3) •	(4) •	(5) O

In each case, think about your experiences with online cybersecurity threats or issues (e.g. being hacked, phishing, etc.) and make your choice in terms of how you feel right now, not what you have felt in the past or would like to feel.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I can keep my devices secure.	(1) •	(2) •	(3) O	(4) •	(5) •
I believe in myself to deal with it.	(1) •	(2) •	(3) •	(4) •	(5) <b>O</b>
I am good at dealing with issues like this.	(1) •	(2) •	(3) •	(4) •	(5) <b>O</b>

I know that I can solve most security problems.	(1) •	(2)	(3) O	(4)	(5) •
I am easily discouraged by failure.	(1) •	(2) •	(3) • •	(4) <b>O</b>	(5) •
I don't see the point in trying.	(1) •	(2) •	(3) O	(4) •	(5) •
I feel helpless.	(1) •	(2)	(3)	(4)	(5) •
They feel like impossible problems.	(1) •	(2) •	(3) • •	(4) <b>O</b>	(5) 🔾
I have friends/family who can help me deal with the threats.	(1) •	(2) •	(3) • •	(4) <b>O</b>	(5) •
I have people who can support me while I deal with the issue.	(1) •	(2) •	(3) •	(4) •	(5) •
I don't have any technically minded friends who can help me.	(1) O	(2) •	(3) O	(4) •	(5) •

I don't have any one I can turn to for support.	(1) <b>O</b>	(2) •	(3) O	(4) •	(5) •
I see them as learning experiences.	(1) •	(2) •	(3) O	(4) •	(5) •
The experiences help me learn how to cope under pressure.	(1) •	(2) •	(3) •	(4)	(5) •
I view them as challenges.	(1) <b>O</b>	(2) •	(3) •	(4) •	(5) <b>O</b>
I can use the experiences to improve.	(1) •	(2) •	(3) •	(4)	(5) •

For each statement below, indicate how often it applied to you during the past two weeks.

	Not at all	Several days	More than half the days	Nearly every day
Feeling nervous, anxious, or on edge	(1) •	(2) •	(3) •	(4) •

Not being able to stop or control worrying	(1) •	(2) •	(3) •	(4) •
Worrying too much about different things	(1) O	(2) •	(3) •	(4) •
Trouble relaxing	(1) •	(2) •	(3) •	(4) O
Being so restless that it is hard to sit still	(1) •	(2) •	(3) •	(4) •
Becoming easily annoyed or irritable	(1) •	(2) •	(3) O	(4) <b>O</b>
Feeling afraid, as if something awful might happen	(1) O	(2) •	(3) •	(4) •

For each, please indicate the degree to which you agree or disagree with each statement. In each case, make your choice in terms of how you feel right now, not what you have felt in the past or would like to feel.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I feel insecure about my ability to interpret a computer printout.	(1) •	(2)	(3) •	(4)	(5) 🔾
I look forward to using a computer in my job.	(1) •	(2)	(3) •	(4) •	(5) O
I do not think I would be able to learn a computer programming language.	(1) •	(2)	(3) •	(4) •	(5) O
The challenge of learning about computers is exciting.	(1) O	(2) •	(3) O	(4) •	(5) •
I am confident that I can learn computer skills.	(1) •	(2)	(3)	(4) •	(5) 🔾
Anyone can learn to use a computer if they are patient and motivated.	(1) •	(2)	(3) •	(4) •	(5) O
Learning to operate computers is like	(1) •	(2) •	(3) •	(4) 🔾	(5)

learning any new skill – the more you practice, the better you become.					
I am afraid that if I begin to use computers I will become dependent upon them and lose some of my reasoning skills.	(1) •	(2)	(3) •	(4) •	(5) •
I am sure that with time and practice I will be as comfortable working with computers as I am in working with a typewriter.	(1) •	(2)	(3) •	(4)	(5) 🔾
I feel that I will be able to keep up with the advances happening in the computer field.	(1) O	(2)	(3) O	(4) •	(5) O
I dislike working with machines that are smarter than I am.	(1) •	(2) •	(3) •	(4) •	(5) •
I feel apprehensive about using	(1) •	(2) •	(3) •	(4) 🔾	(5) 🔾

computers.					
I have difficulty in understanding the technical aspects of computers.	(1) •	(2) •	(3) •	(4) <b>O</b>	(5) •
It scares me to think that I could cause the computer to destroy a large amount of data by hitting the wrong key.	(1) •	(2) •	(3) O	(4) O	(5)
I hesitate to use a computer for fear of making mistakes that I cannot correct.	(1) •	(2) •	(3) • •	(4) •	(5) •
You have to be a genius to understand all the special keys contained on most computer terminals.	(1) <b>O</b>	(2) •	(3) O	(4) <b>O</b>	(5) •
If given the opportunity, I would like to learn about and use computers.	(1) •	(2)	(3) •	(4)	(5) •

I have avoided computers because they are unfamiliar and somewhat intimidating to me.	(1) •	(2) •	(3) •	(4)	(5) •
I feel computers are necessary tools in both educational and work settings.	(1) •	(2) •	(3) •	(4) •	(5) • • • • • • • • • • • • • • • • • • •

For each, please indicate the degree to which you agree or disagree with each statement. In each case, make your choice in terms of how you feel right now, not what you have felt in the past or would like to feel.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Increasing computer usage is changing children's brains for the worse.	(1) •	(2)	(3) •	(4) •	(5) O
It's only a matter of time until the global web is brought down with dire consequences.	(1) O	(2) •	(3) O	(4) •	(5) •

I avoid using the internet on personal matters so as not to have my details accessed.	(1) •	(2)	(3) •	(4) O	(5) •
I worry about others editing my Facebook page (or similar) without my consent.	(1) •	(2)	(3)	(4) •	(5)
I worry about the effects of electromagnetic waves from mobile phones/phone masts.	(1) •	(2)	(3) •	(4) •	(5) •
Terrorists will find new ways to use the internet to plan new attacks on the general public.	(1) •	(2) •	(3) O	(4) •	(5) •
Payment cards such as credit cards allow the authorities to monitor my travel and purchases.	(1) •	(2)	(3) •	(4) O	(5) •
Companies that store	(1) 🔾	(2)	(3)	(4) 🔾	(5) 🔾

data on customers are very vulnerable to theft of my private details.					
People do not worry enough about threats from their use of technology.	(1) O	(2) •	(3) O	(4) •	(5) <b>O</b>
People should worry that their movements can be monitored via their 'smartphone'.	(1) •	(2) •	(3) •	(4) •	(5) •
Closed circuit television cameras (CCTV) are illegally used to spy on people.	(1) O	(2) •	(3) O	(4) O	(5) <b>O</b>

# **Demographics**

# What is your total houshold income before taxes during the past 12 months?

(1) O Less than \$31,200

(2) **331,201 - \$49,999** 

(3) **3** \$50,000 **-** \$74,999

(4) 375,000 - \$99,999

(5) • \$100,000 - \$149,999

(7) O Prefer not to say
What is the highest level of education you have completed?
(1) O Some high school or less
(2) O High school diploma or GED
(3) O Some college, but no degree
(4) O Associates or technical degree
(5) O Bachelor's degree
(6) O Graduate or professional degree (MA, MS, MBA, PhD, JD, MD, DDS etc.)
(7) O Prefer not to say
Please enter your Prolific ID below:
Please enter your Prolific ID below:  ——  Please provide any feedback or suggestions below, if applicable.

(6) **3** \$150,000 or more