1 Exploratory Factor Analysis

1.1 Pilot survey

1.1.1 Q_1

Orthogonal Rotation

ID	Item Description	MR1	MR2	MR3
s_14	I fear strangers getting access to personal information.	0.787		
s_6	I am concerned about my cybersecurity vulnerability.	0.719		
s_2	I am extremely terrified about cyberthreats.	0.669		
s_13	Thinking about cyberattacks makes me fearful.	0.663		
s_24	I get nervous when other people use my technology devices.	0.663		
s_5	I often worry about the rapid development in technology.	0.469		
s_108	I make sure to backup my devices.		0.876	
s_107	I regularly perform backups.		0.722	
s_115	I want to live off the grid.		-0.442	
s_123	To prevent devices from listening to my conversations, I ensure their microphones are disabled.			0.673
s_109	Generally, I use a VPN to disguise my internet movement.			0.641
s_111	I only use a password manager for my most critical passwords			0.508
s_124	I worry about people editing my social media page without my consent.			0.418

Oblique Rotation

ID	Item Description	MR1	MR2	MR3
s_14	I fear strangers getting access to personal information.	0.816		
s_6	I am concerned about my cybersecurity vulnerability.	0.784		
s_24	I get nervous when other people use my technology devices.	0.725		
s_13	Thinking about cyberattacks makes me fearful.	0.686		
s_2	I am extremely terrified about cyberthreats.	0.650		
s_11	I increasingly fear the internet.	0.561		
s_5	I often worry about the rapid development in technology.	0.455		
s_130	I do not mind sharing my contact information in cyberspace.	-0.422		
s_108	I make sure to backup my devices.		0.864	
s_107	I regularly perform backups.		0.717	
s_115	I want to live off the grid.		-0.478	
s_123	To prevent devices from listening to my conversations, I ensure their microphones are disabled.			0.680
s_109	Generally, I use a VPN to disguise my internet movement.			0.645
s_111	I only use a password manager for my most critical passwords			0.592

ID	Item Description
s_7	Worrying about cyberattacks frequently keeps me up at night.
s_8	Overthinking keeps me awake at night.
s_10	I get irritated frequently.
s_12	I am extremely afraid of the internet.
s_17	After being affected by a cyberattack, I isolate myself.
s_19	I get a headache when trying to implement the recommended security measures.
s_23	I feel secure against cyberattacks.
s_25	My shyness hinders my ability to socialize online.
s_27	Shyness reduces my social interaction with others.
s_28	I have no fear of speaking up in conversations.
s_29	I am afraid to answer phone calls in public.
s_30	I am afraid to give a speech in front of an audience.
s_32	I have difficulties talking to people I do not know well.
s_33	I have difficulties talking to strangers.
s_34	I have difficulties meeting strangers in person.
s_37	Generally, I am confident in my computer skills.
s_39	Generally, I am confident in my computer skills.
s_40	I believe it is inevitable that my data gets stolen.
s_105	If I were to be prevented in using social media, I would lose friends.
s_106	I have an up-to-date antivirus program on my device.
s_110	I use a password manager for most of my passwords.
s_112	While creating my password, I choose a hard-to-guess password consisting of symbols, numbers and capital letters.
s_116	The rise of technology has brought more problems than good.
s_117	I am a late adopter to new technologies.
s_118	My fear for artificial intelligence prevents me from using it.
s_119	My difficulty to grasp artificial intelligence prevents me from using it.
s_121	I dislike everything digital.
s_122	I am certain that my devices listen to my conversations.
s_126	I worry that my location can be monitored via my mobile device.
s_127	I respect other people's privacy without exception.
s_128	It is important to ask for consent before sharing other peoples personal information.
s_131	Companies store an excessive amount of information on their users.
s_132	I appreciate companies that give me control over my personal information.
s_133	I am interested in knowing how companies use and protect my personal information.
s_134	Data privacy laws for companies need to be more strict.

1.1.2 Q_2

Orthogonal Rotation

ID	Item Description	MR1	MR2	MR3
s_150	I fear strangers reading old chat messages of mine.	0.823		
s_151	I often fear hackers reading old chat messages of mine.	0.806		
s_144	I fear unauthorized access to my social media accounts.	0.747		
s_140	I often fear strangers posting on my social media accounts.	0.734		
s_145	I fear hackers could gain access to my social media accounts for cyberbullying purposes.	0.634		
s_138	I constantly worry about being tracked.	0.620		
s_152	I often fear the police reading old chat messages of mine.	0.613		
s_148	I fear losing access to my accounts containing digital purchases.	0.476		
s_54	I feel apprehensive about using two-factor authentication.	0.463		
s_64	I frequently change my passwords.		0.708	
s_61	I regularly review my account login history for unusual activity.		0.663	
s_47	I consistently scan downloaded files for malicious software.		0.501	
s_57	I pay people to manage my cybersecurity.		0.467	
s_44	I make sure that my credit card information is not saved in online accounts.		0.463	
s_53	I feel apprehensive about using e-mail services.		0.424	
s_166	I have a specific person I go to regarding tech-support.		0.422	
s_147	I own digital goods that are irreplaceable.			0.670
s_142	I own crypto currency.			0.597
s_75	I have completed an education in the field of technology or a field related to technology.			0.504

Oblique Rotation

ID	Item Description	MR1	MR2	MR3
s_150	I fear strangers reading old chat messages of mine.	0.897		
s_144	I fear unauthorized access to my social media accounts.	0.862		
s_151	I often fear hackers reading old chat messages of mine.	0.820		
s_140	I often fear strangers posting on my social media accounts.	0.783		
s_138	I constantly worry about being tracked.	0.644		
s_145	I fear hackers could gain access to my social media accounts for cyberbullying purposes.	0.633		
s_152	I often fear the police reading old chat messages of mine.	0.584		
s_148	I fear losing access to my accounts containing digital purchases.	0.533		
s_65	I fear being impersonated online.	0.446		
s_64	I frequently change my passwords.		0.772	
s_61	I regularly review my account login history for unusual activity.		0.674	
s_57	I pay people to manage my cybersecurity.		0.546	
s_47	I consistently scan downloaded files for malicious software.		0.518	
s_44	I make sure that my credit card information is not saved in online accounts.		0.462	
s_166	I have a specific person I go to regarding tech-support.		0.461	
s_147	I own digital goods that are irreplaceable.			0.696

ID		
s_142	I own crypto currency.	0.635
s_75	I have completed an education in the field of technology or a field related to technology.	0.514

$Q2$ Removed

ID	Item Description
s_41	I limit my online activities on personal matters to protect my privacy.
s_43	I do not share sensitive information online.
s_45	I only open e-mails from verified senders.
s_50	I'm more comfortable with information technology (IT) whose decision-making processes are clear to me.
s_51	I feel apprehensive about using computers.
s_55	I feel apprehensive about using a VPN service.
s_58	I only accept essential cookies when browsing the internet.
s_59	I avoid websites which are marked as unsafe by my browser or my antivirus program.
s_60	I often put myself in situations with increased cybersecurity risks.
s_62	I tape my webcam on most of my devices.
s_63	I believe cyberattacks are common.
s_68	I expect to lose my job to artificial intelligence in the future.
s_69	I believe people in my social circle want to have access to my personal data.
s_70	I am uncomfortable with people in my social circle having access to my personal data.
s_72	I consistently follow good cybersecurity practices.
s_73	My own lack of knowledge makes me lose interest in good cybersecurity practices.
s_135	Authorities should implement stricter data privacy laws.
s_136	There is a need for more cybersecurity regulations.
s_141	I own a significant amount of monetary assets making me nervous about cyberattacks.
s_146	Losing my social media accounts is worse than losing my e-mail accounts.
s_154	I know what to do if I get affected by a cyber scam.
s_155	I know my strengths and weaknesses when it comes to cybersecurity.
s_156	I have been taught good cybersecurity practices.
s_158	I have never been deceived by a cyber scam.
s_159	I have adequate knowledge to help myself in case of a cyberattack.
s_161	I believe I can recover from a cyberattack on my own.
s_162	I avoid clicking links from websites unfamiliar to me.
s_164	I feel that cybersecurity is not under my control.
s_165	I am overwhelmed and unable to act after being the victim of a cyberattack.
s_167	I feel help is available in the case of a cyberattack.

4

1.1.3 Q_3

Orthogonal Rotation

ID	Item Description	MR1	MR2	MR3
s_170	I often consult a cybersecurity expert (e.g. IT help desk, professionals)	0.817		
s_183	I am familiar with how someone I know has dealt with a cyberattack and intend to follow their example.	0.628		
s_94	I consistently avoid screen time one hour before I go to bed.	0.611		
s_79	I have attended a cybersecurity training course.	0.512		
s_180	I follow influencers who discuss cybercrimes or security issues.	0.477		
s_84	I regularly read news related to technology.	0.460		
s_188	I like to get personalized advertisement on websites.	0.445		
s_177	Someone close to me has been a victim of a cyberattack.		0.840	
s_174	Someone close to me has become a victim of a cyber scam before.		0.772	
s_93	I spend too much time using technology devices.		0.445	
s_181	Theft in real life has prompted me to be more mindful of my online security risks.			0.840
s_195	Compared to others, I am more sensitive about the way online companies handle my personal information.			0.582
s_200	I fear artificial intelligence generating photos of me.			0.420

Oblique Rotation

ID	Item Description	MR1	MR2	MR3
s_170	I often consult a cybersecurity expert (e.g. IT help desk, professionals)	0.840		
s_183	I am familiar with how someone I know has dealt with a cyberattack and intend to follow their example.	0.632		
s_94	I consistently avoid screen time one hour before I go to bed.	0.628		
s_79	I have attended a cybersecurity training course.	0.511		
s_84	I regularly read news related to technology.	0.488		
s_180	I follow influencers who discuss cybercrimes or security issues.	0.467		
s_188	I like to get personalized advertisement on websites.	0.449		
s_177	Someone close to me has been a victim of a cyberattack.		0.865	
s_174	Someone close to me has become a victim of a cyber scam before.		0.790	
s_93	I spend too much time using technology devices.		0.459	
s_181	Theft in real life has prompted me to be more mindful of my online security risks.			0.893
s_195	Compared to others, I am more sensitive about the way online companies handle my personal information.			0.566

*Q*3 **Removed**

ID	Item Description
s_76	I have increased my usage of technology devices in the last six months.
s_77	I feel confident in my understanding of how computers operate.
s_78	I enjoy using technology devices.
s_81	Generally, I am interested in technology.
s_82	I like the possibilities enabled through technology.
s_85	I cannot imagine life without technology devices.
s_86	I have researched how to best protect myself against cyberattacks.
s_87	Newer technology devices are too complicated for me.
s_88	I like to experiment with new features of my technology devices.
s_89	I like to automate mundane tasks with the help of technology.
s_90	I use a digital calendar to keep track of my appointments.
s_91	I prefer using pen and paper compared to digital tools.
s_92	I have increased my social media usage in the last six months.
s_95	If one of my accounts gets breached, it would be worrisome for me.
s_97	I have more online accounts than the average person.
s_98	I generally use the cyber environment to solve the problems I encounter in my daily life.
s_99	My social media accounts are important to me.
s_100	I like to share my life with others on social media.
s_101	I disclose more personal information on social media than is strictly required.
s_103	If I were to be prevented in using social media, an essential part of my life would be missing.
s_104	If I were to be prevented in using social media, I would feel lonely.
s_169	I often consult a psychologist.
s_171	I would seek guidance from family and friends in case of a cyberattack.
s_172	I would seek help from a psychologist in the case of a cyberattack.
s_173	I have become the victim of a cyber scam before.
s_176	If I fall victim to a cyberattack, I am going to take drastic measures to ensure it will not happen again.
s_178	A cyberattack significantly altered the personality of someone I know.
s_182	Experiencing theft has made me take cyberattacks more seriously.
s_184	I frequently fact check online information.
s_186	I regret things I posted online.
s_187	Online businesses should only share personal information to other companies with consent from the individuals who provided it.
s_189	I fear companies selling my personal information.
s_191	Whether I create an account depends on the personal information a company requests.
s_192	Companies seeking information online should disclose the way the data are collected, processed, and used.
s_194	Online companies should devote more time and effort to preventing unauthorized access to personal information.
s_196	Compared with other subjects on my mind, personal privacy is very important.
s_197	I believe other people are too much concerned with online privacy issues.

s_198	I dislike others posting me without my consent on their social media.
s_199	Artificial intelligence is the next industrial revolution.
s_203	I am good at identifying media created by artificial intelligence.
s_204	Artificial intelligence is going to enslave humanity.

1.1.4 Q_4

Orthogonal Rotation

ID	Item Description	MR3	MR1	MR2
s_66	I constantly worry about my identity being stolen online.	0.794		
s_1	I constantly worry about cybersecurity.	0.748		
s_139	I constantly fear losing my online data.	0.744		
s_143	I fear becoming a victim of cyberbullying.	0.600		
s_179	I often hear about cybercrimes through popular media (e.g. TV-shows, movies, podcasts, etc.).	0.554		
s_201	I fear being impersonated by artificial intelligence.	0.510		
s_83	I am up to date with the newest cybersecurity practices.	0.472		
s_137	There is a need for more regulations regarding artificial intelligence.	0.434		
s_175	I get nervous when reading news about cybersecurity.		0.743	
s_21	I feel physically unwell after a cyberattack.		0.716	
s_163	I feel helpless when it comes to cybersecurity.		0.623	
s_16	After being affected by a cyberattack, I get depressed.		0.417	
s_120	I believe artificial intelligence will become dangerous in the future.			0.763
s_202	I feel like artificial intelligence makes my education useless.			0.445
s_80	Increasing computer usage is changing children?s brains for the worse.			0.414

Oblique Rotation

ID	Item Description	MR3	MR1	MR2
s_66	I constantly worry about my identity being stolen online.	0.791		
s_1	I constantly worry about cybersecurity.	0.730		
s_139	I constantly fear losing my online data.	0.723		
s_143	I fear becoming a victim of cyberbullying.	0.572		
s_83	I am up to date with the newest cybersecurity practices.	0.531		
s_201	I fear being impersonated by artificial intelligence.	0.489		
s_137	There is a need for more regulations regarding artificial intelligence.	0.425		
s_175	I get nervous when reading news about cybersecurity.		0.734	
s_21	I feel physically unwell after a cyberattack.		0.726	
s_163	I feel helpless when it comes to cybersecurity.		0.625	
s_120	I believe artificial intelligence will become dangerous in the future.			0.769
s_202	I feel like artificial intelligence makes my education useless.			0.449

Q4 **Removed**

ID	Item Description
157	I know how to distinguish a valid e-mail from a suspicious e-mail
s_113	I use two-factor authentication to secure the majority of my online accounts.
s_20	I get uncomfortable when trying to implement the recommended security measures.
s_190	I believe that the benefits of internet usage exceed the disadvantages of giving my personal information to companies.
s_74	I trust experts' recommendations about cybersecurity measures (e.g. using unique passwords or a password manager, installing recommended software updates, etc.).
s_38	I expect to be targeted by a cyberattack.
s_168	There are people in my life I can talk to about cybersecurity.
s_56	I am afraid of making irreversible mistakes when using technology devices.
s_49	I dislike working with information technology (IT) which I do not understand.
s_3	I often worry about information technology (IT).
s_15	Worrying about cyberattacks makes me unable to relax.
s_52	I feel apprehensive about cybersecurity.
s_46	I ensure the safety of links in e-mails before I click them.
s_159	I have adequate knowledge to help other people with cybersecurity issues.
s_96	At least one of my accounts has been breached in the last six months.
s_129	Storing data in cyberspace is not safe.
s_125	Companies that store data on customers are very vulnerable to theft of my personal information.
s_102	The absence of social media would be a major loss for me.
s_26	I prefer socializing online.
s_9	The cybersecurity topic irritates me.
s_31	I struggle to reach out to unfamiliar people online.
s_67	I expect artificial intelligence to significantly impact the job market.
s_48	I do not trust corporations to keep my data safe.
s_35	I have stopped reading cybersecurity related news since they stress me out.
s_18	After being affected by a cyberattack, I lose pleasure in activities I normally enjoy.
s_71	Generally, I am aware of existing cybersecurity threats.
s_36	I use the internet to distract myself from ongoing problems in my life.
s_185	I was the reason for a past data breach.
s_22	I have more important matters to worry about, than being targeted by cyberattacks.
s_154	I have implemented the necessary security measures for me to feel safe from cyberattacks.
s_42	People do not worry enough about cyberthreats from their use of technology.
s_149	During last year I have suffered financial loss due to a cyber scam.
s_4	I constantly worry about artificial intelligence.
s_114	I am careful about what personal information I disclose online.
s_193	It usually bothers me when online companies ask me for personal information.

1.2 Second Data Collection Round

ID	Item Description	MR1	MR2	MR3
s_144	I fear unauthorized access to my social media accounts.	0.927		
s_65	I fear being impersonated online.	0.907		
s_14	I fear strangers getting access to personal information.	0.868		
s_124	I worry about people editing my social media page without my consent.	0.808		
s_66	I constantly worry about my identity being stolen online.	0.807		
s_6	I am concerned about my cybersecurity vulnerability.	0.807		
s_143	I fear becoming a victim of cyberbullying.	0.800		
s_148	I fear losing access to my accounts containing digital purchases.	0.791		
s_145	I fear hackers could gain access to my social media accounts for cyberbullying purposes.	0.773		
s_139	I constantly fear losing my online data.	0.759		
s_151	I often fear hackers reading old chat messages of mine.	0.674		
s_140	I often fear strangers posting on my social media accounts.	0.657		
s_1	I constantly worry about cybersecurity.	0.654		
s_150	I fear strangers reading old chat messages of mine.	0.638		
s_2	I am extremely terrified about cyberthreats.	0.632		
s_13	Thinking about cyberattacks makes me fearful.	0.627		
s_138	I constantly worry about being tracked.	0.593		
s_195	Compared to others, I am more sensitive about the way online companies handle my personal information.	0.492		
s_181	Theft in real life has prompted me to be more mindful of my online security risks.	0.490		
s_201	I fear being impersonated by artificial intelligence.	0.482		
s_93	I spend too much time using technology devices.	0.433		
s_107	I regularly perform backups.		0.726	
s_108	I make sure to backup my devices.		0.674	
s_83	I am up to date with the newest cybersecurity practices.		0.673	
s_79	I have attended a cybersecurity training course.		0.649	
s_61	I regularly review my account login history for unusual activity.		0.615	
s_75	I have completed an education in the field of technology or a field related to technology.		0.609	
s_183	I am familiar with how someone I know has dealt with a cyberattack and intend to follow their example.		0.605	
s_84	I regularly read news related to technology.		0.559	
s_174	Someone close to me has become a victim of a cyber scam before.		0.470	
s_177	Someone close to me has been a victim of a cyberattack.		0.465	
s_64	I frequently change my passwords.		0.463	
s_11	I increasingly fear the internet.			0.647
s_120	I believe artificial intelligence will become dangerous in the future.			0.633
s_5	I often worry about the rapid development in technology.			0.609
s_80	Increasing computer usage is changing children?s brains for the worse.			0.602
s_202	I feel like artificial intelligence makes my education useless.			0.593
s_53	I feel apprehensive about using e-mail services.			0.495
s_54	I feel apprehensive about using two-factor authentication.			0.409

Second Data Collection Round Removed

ID	Item Description
s_16	After being affected by a cyberattack, I get depressed.
s_21	I feel physically unwell after a cyberattack.
s_24	I get nervous when other people use my technology devices.
s_44	I make sure that my credit card information is not saved in online accounts.
s_47	I consistently scan downloaded files for malicious software.
s_57	I pay people to manage my cybersecurity.
s_94	I consistently avoid screen time one hour before I go to bed.
s_109	Generally, I use a VPN to disguise my internet movement.
s_111	I only use a password manager for my most critical passwords.
s_115	I want to live off the grid.
s_123	To prevent devices from listening to my conversations, I ensure their microphones are disabled.
s_130	I do not mind sharing my contact information in cyberspace.
s_137	There is a need for more regulations regarding artificial intelligence.
s_142	I own cryptocurrency.
s_147	I own digital goods that are irreplaceable.
s_152	I often fear the police reading old chat messages of mine.
s_163	I feel helpless when it comes to cybersecurity.
s_166	I have a specific person I go to regarding tech support.
s_170	I often consult a cybersecurity expert (e.g., IT help desk, professionals).
s_175	I get nervous when reading news about cybersecurity.
s_179	I often hear about cybercrimes through popular media (e.g., TV shows, movies, podcasts, etc.).
s_180	I follow influencers who discuss cybercrimes or security issues.
s_188	I like to get personalized advertisements on websites.
s_200	I fear artificial intelligence generating photos of me.