Final Report of
Data-driven Marketing

Title: SmartPLS based data analysis report for the current and future use of ChatGPT

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1. Introduction - Van Thanh

The integration of advanced technologies, such as ChatGPT and other Generative AI tools, has become increasingly prevalent in various domains, including the academic environment. These tools leverage vast datasets and sophisticated algorithms to generate human-like content, transforming the way information is accessed and utilised. This quantitative analysis report aims to investigate students' attitudes towards the use of ChatGPT and Generative AI tools, exploring their perceptions, satisfaction levels, and potential incorporation into the academic world.

Objectives:
To gain insights into students' attitudes and preferences regarding the functionality and features of ChatGPT, both in academic and personal contexts. This will help gauge their overall satisfaction with the tool.

To examine the impact of usage frequency on students' intent to continue using Generative AI tools. By analysing how the frequency of engagement influences their adoption of these tools, we can better understand their future usage patterns.

To explore the role of privacy and security concerns in shaping students' willingness to embrace Generative AI tools. Understanding these concerns is crucial in addressing potential barriers to adoption.

Research Questions (RQs):

Are students satisfied with the functionality and features of ChatGPT when utilised for academic or personal purposes?

Does the frequency of using Generative AI tools, such as ChatGPT, impact students' future intent to continue using them?

How do privacy and security concerns influence students' willingness to embrace and utilise Generative AI tools like ChatGPT?

Significance of the Study:

This study holds significant importance in understanding students' attitudes towards Generative AI tools and their potential implications in the academic realm. The findings will inform educators, policymakers, and developers about the feasibility of integrating these tools into educational settings. Additionally, exploring students' satisfaction levels and privacy concerns will contribute to enhancing data protection measures and user trust in utilising Generative AI tools.

Brief Literature Review:

While Generative AI tools have shown promise in assisting students with various tasks, little research has focused on students' attitudes towards specific tools like ChatGPT. Existing literature highlights the potential of Generative AI in education, but there is a need for in-depth insights into students' perceptions and preferences. This study aims to fill this gap by investigating students' attitudes, addressing potential barriers, and assessing the desirability of integrating Generative AI tools into the academic world.

Hypotheses:

Students will demonstrate a generally positive attitude towards the functionality and features of ChatGPT when used for academic or personal purposes.

The frequency of using Generative AI tools will positively influence students' future intent to continue using them.

Privacy and security concerns will act as significant factors influencing students' willingness to embrace and utilise Generative AI tools like ChatGPT.

These hypotheses will be rigorously tested to gain a comprehensive understanding of students' perspectives and their implications for the effective integration of Generative AI tools in education.

2. Methodology - Eduardo / Enzo

Research Design:

The research was designed as a quantitative study, utilising a survey method to collect data from a diverse sample of individuals. The survey was created and distributed via Google Forms, a tool that allows for easy distribution and collection of responses. The survey was designed to gather data on various aspects of the respondents' experiences and perceptions of using ChatGPT in educational settings.

Survey:

The survey was the main data collection instrument used in this study. It aimed to gather quantitative data from a larger and diverse population of students. It consisted of a series of questions designed to gather demographic data (age, gender, highest level of education, estimated annual income) as well as data on the respondents' use and perceptions of ChatGPT. Questions included frequency of use, comfort with technology, perceptions of AI, comfort with using ChatGPT for sensitive topics, concerns about misuse, and willingness to pay for premium features, among others. The questions were a mix of multiple choice and Likert scale questions, allowing for both categorical and ordinal data to be collected. The survey was designed to capture various aspects of students' interactions with ChatGPT. We divided our survey in 4 main stages:

Stage 0 - User Level: General questions about the users filling out the questionnaire. They range from age, gender, education, and income.

Stage 1 - Technological Level: Our main goal in the first stage was to find out the frequency of technology usage, the knowledge of technology from the user, their use with Chat GPT, frequency using ChatGPT, their individual uses of ChatGPT, and Their feelings towards it. In the first stage we focused on the frequency, use cases and satisfaction levels:

- Frequency of Usage: Participants were asked how often they used ChatGPT in their educational activities.
- Specific Use Cases: Students were queried about the specific purposes for which they used ChatGPT, such as academic assistance, content generation, or problem-solving.

- Satisfaction Levels: Participants were asked to rate their satisfaction with using ChatGPT for their educational needs.

Stage 2 - Future Use: In this part we asked users to tell us about their planned future use of ChatGPT, their vision on where it would go and if paying for this type of service in the future is in their minds.

- Willingness to Pay for Premium Service: The survey included questions to gauge students' willingness to pay for premium features or services related to ChatGPT.
- Future intention: Our survey included the users to express if they would continue using ChatGPT outside of school, and onward into their professional career.
- Industrial Use: We asked users if they believed Generative AI would take some sort of use in the industrial world.

Stage 3 - Recommendations: In the last part we ask the users about if they have recommended or talked about ChatGPT with their peers.

Sample Size:

The survey collected responses from a total of 45 participants. While this sample size may not be fully representative of the entire student population, it provided valuable insights and allowed for a preliminary exploration of mostly masters students' use of ChatGPT.

The sample size based on gender was close to 60% male to 40% female.

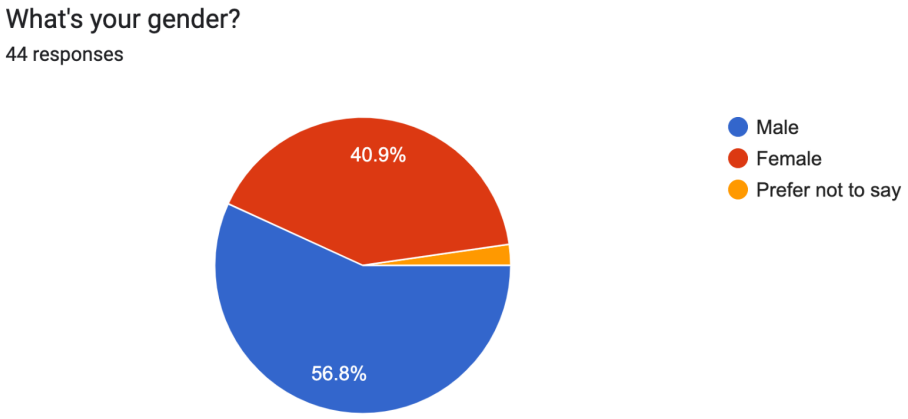

Fig.1 Ratio of the gender of responses

Ethical Considerations:

Ethical considerations were taken into account throughout the research process. Participants were informed about the purpose of the study, the nature of their involvement, and their right to participate voluntarily. No personally identifiable information was collected in the survey. Their confidentiality and anonymity were ensured, as no identifying information was collected during the survey. Participants were also informed that they could withdraw from the study at any point without any negative consequences.

Data Collection:

Data was collected via Google Forms and the responses were automatically recorded in a Google Spreadsheet. This allowed for easy and efficient collection and analysis of the data. The data was then analysed to gain insights into the respondents' experiences and perceptions of using ChatGPT. The survey link was distributed to potential participants via appropriate channels, such as university mailing lists, social media groups, educational forums, and direct contacts.

Data Transformation:

For categorical data, we transform them into numerical data to ease the procedure of calculation. We decide the data transformation rules as they showed in the following **Table 1**.

Table.1 Categorical data transformation

Frequency1		**Frequency2**		**Subscription1**		**Subscription5**	
0 times per week	1	Less than 5 minutes	1	Yes	2	Yes	2
1-2 times per week	2	5 to 15 minutes	2	No	1	No	1
3-5 times per week	3	15 to 30 minutes	3	Maybe	3	Maybe	3
More than 5 times per week	4	More than 30 minutes	4				
Usefulness1		**Usefulness2**		**Subscription2**		**WOM2**	
Yes	2	Yes	2	Yes	2	Yes	2
No	1	No	1	No	1	No	1
Maybe	3	Maybe	3	Maybe	3	Maybe	3
Future1		**Accuracy5**		**Subscription3**		**WOM3**	
Yes	2	Yes	2	Yes	2	Yes	2
No	1	No	1	No	1	No	1
Maybe	3	Maybe	3	Maybe	3	Maybe	3

Data Cleaning and Organization:

Prior to analysis, the data was cleaned and organised to ensure accuracy and relevance. This process involved removing any incomplete or irrelevant responses. For example, entries where the respondent did not answer the majority of the questions were excluded from the analysis. Additionally, any responses that were clearly outliers or nonsensical were also removed to ensure the integrity of the data.

The data was then organised in a manner that facilitated easy analysis. This involved categorising the responses to multiple-choice questions and converting responses into numerical values for statistical analysis. For example, responses to the question "On a scale

of 1 to 5, how likely are you to continue using ChatGPT in the future?" were converted into numerical values, with 1 representing "Very Unlikely" and 5 representing "Very Likely".

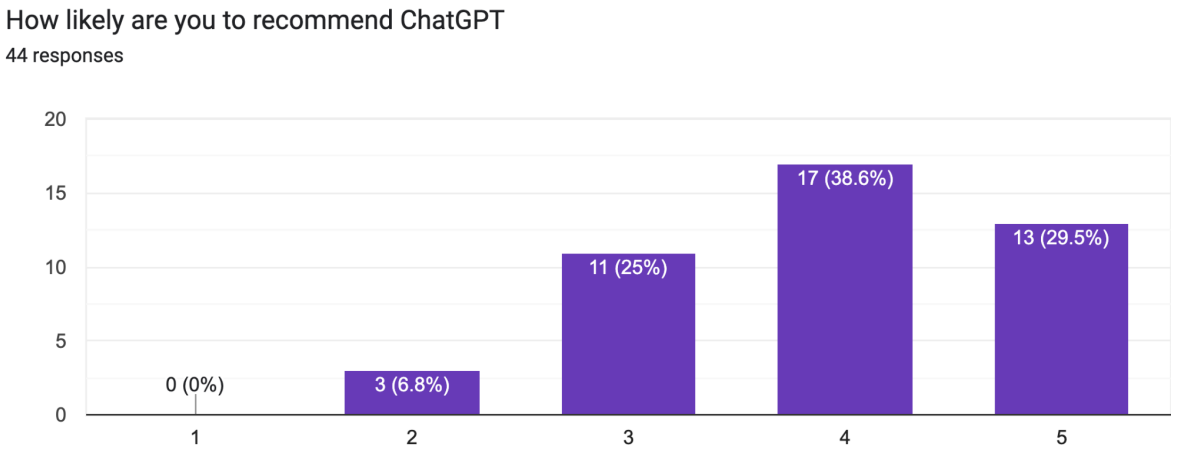

Fig.2 Likelihood to recommend ChatGPT

Data Analysis:

The cleaned and organised data was then analysed to provide a summary of the data and inferential statistics to draw conclusions about the larger population from which the sample was drawn.

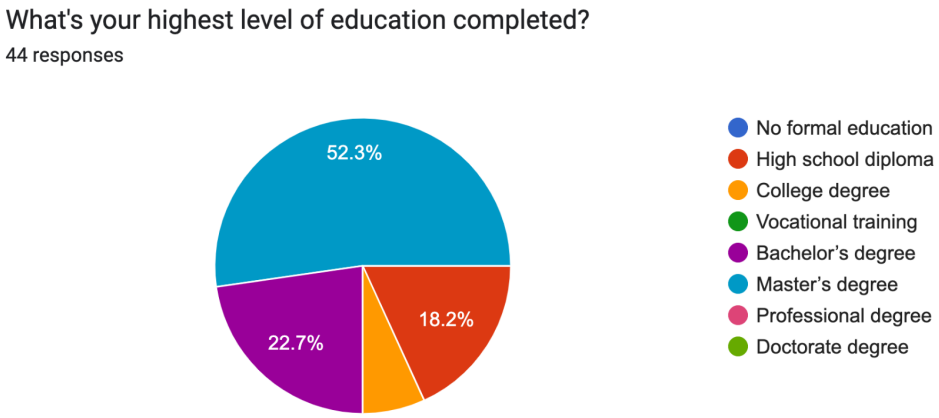

Fig.3 Highest education level of candidates (Ratio)

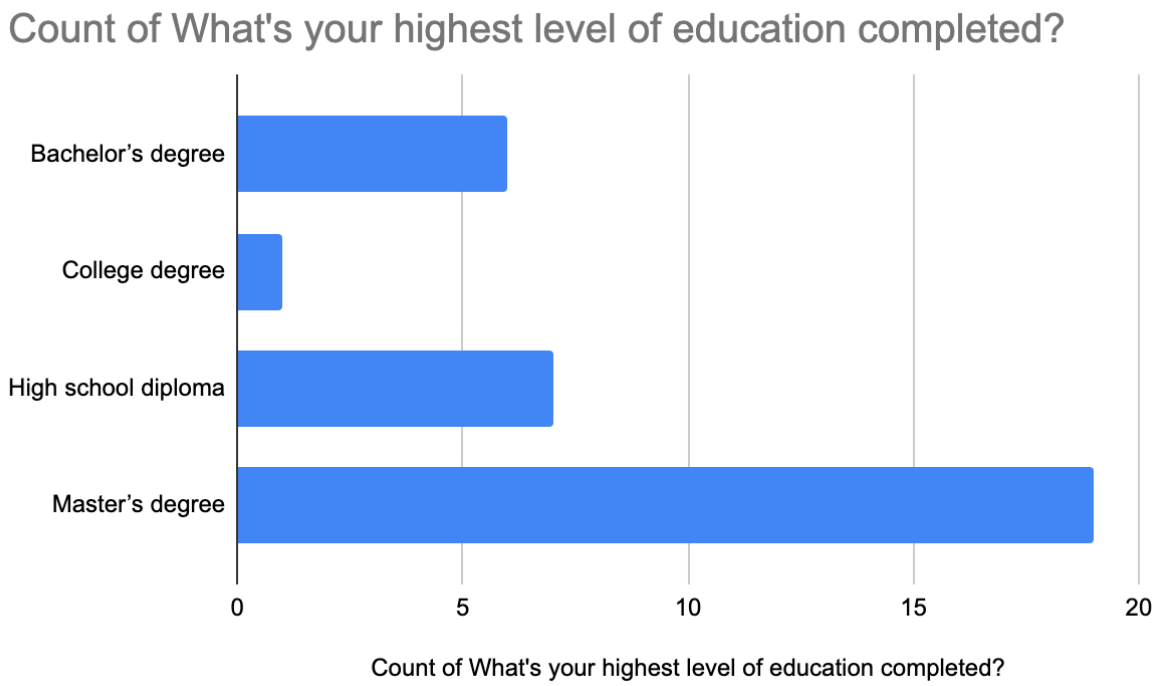

Fig.4 Highest education level of candidates (Count)

Descriptive statistics such as frequencies, percentages, means, and standard deviations were used to summarise key characteristics and explore relationships between variables. Structural Equation Modelling (SEM) using SMARTPLS was employed to model complex relationships and examine the impact of ChatGPT usage on students' satisfaction levels and willingness to pay for premium services. The findings provided valuable insights into students' interactions with ChatGPT in educational contexts, contributing to a comprehensive understanding of its usage and implications for student motivations, satisfactions and limitations.

3. Analysing Procedure and Results

Analysing Process - Henri/Haozhe

After receiving the data collected from the questionnaire, we did a bunch of data cleaning procedures like: categorical data encoding (into numerical data), data filtering, outliers and missing data processing etc. After the data cleaning, we transform the xlsx. file into csv and import it into smartPLS.

Then, we import the csv data and create the PLS-SEM model for analysing them. The model is shown in **Fig.5**, and in the following part, we are going to do further analysis on the result of calculation.

Model Building: Henri/Haozhe

As for the model built in the SmartPLS, we made it into three layers: the first layer represents the current situation and users' attitudes towards ChatGPT; the second layer illustrates the future behaviours users made react on this product and the final layer is the development users might take to the product in the future.

Frequency: in this topic, our target is to find out what is the frequency the users reach to ChatGPT. To be more specific, we studied mainly how many times we interact and how long each time is of the usage of both ChatGPT and AI tools.

Privacy: this part are the questions to figure out how serious of the awareness and concerns for users while using ChatGPT (especially providing some personal information) and how much they trust on the possible usage of their data by ChatGPT

Usefulness: this topic is meant to find out in which situations the users might use the ChatGPT and how useful the users think of this Chatbot.

Accuracy: it focuses on to what extent the users think they receive reliable and accurate answers and their personal ideas towards ChatGPT.

Future: this part measures the intention of users to continue utilising ChatGPT in the future whether in which region of work.

Subscription: this topic intends to get the willingness for users to spend money on the paid version of ChatGPT (GPT-4 now and may be the free edition of GPT-3.5 in the future).

WoM: WoM counts significantly in the running of a product or a service, this will largely affect the better operation of ChatGPT in the future, and we set this topic as the key factor we are going to study in this experiment.

Here, I put the link that can reach to the calculation results: Quantitative data.xlsx

Data Report and Analysis: Haozhe/Ruthvik

1) Measurement models assessment (done through calculate – algorithm model)

- **Outer loadings:**
  In terms of outer loadings, a common threshold of outer loadings is set to 0.7. So we can do the following analysis:

  1. It has a weak relationship with the latent variables 'Accuracy' and 'Privacy' because the lower data it get;
  2. It has a strong relationship with the variables 'frequency', 'future' and 'usefulness' because of the relatively high score they get in this indicator;
  3. More interesting, the variables 'subscription' have an inverse relationship with the target.

- **Construct reliability and validity:**
  As for the construct reliability and validity, I can make the following analysis:

  1. Accuracy:

- Moderately reliable based on Cronbach's Alpha (0.552) and Composite Reliability (0.638 and 0.723).
- Adequate Average Variance Extracted (0.381).

2. Frequency:
- Good reliability with Cronbach's Alpha (0.739) and Composite Reliability (0.874 and 0.845).
- High Average Variance Extracted (0.656).

3. Future:
- Moderately reliable based on Composite Reliability (0.749 and 0.687).
- Moderate Average Variance Extracted (0.419).

4. Privacy:
- Moderately reliable based on Composite Reliability (0.297 and 0.556).
- Relatively low Average Variance Extracted (0.314).

5. Subscription:
- Poor reliability indicated by Cronbach's Alpha (0.244) and Composite Reliability (-0.493 and 0.274).
- Low Average Variance Extracted (0.165).

6. Usefulness:
- Low reliability according to Cronbach's Alpha (0.265).
- Moderate Composite Reliability (0.419 and 0.618) and Average Variance Extracted (0.4).

- **Discriminant validity:**

  Based on the correlation matrix (which is presented in section appendices), we can see that all the correlations between the latent variables are below 1. This suggests that there is discriminant validity, as each construct is not perfectly correlated with the others.

  We can conclude that there is discriminant validity among the latent variables in the model. Each construct measures a distinct concept and is not highly correlated with other constructs, indicating that they are unique and not redundant.

- **Collinearity statistics (VIF):**

  As for collinearity statistics, it helps assess the level of multicollinearity between predictor variables in a regression or structural equation model. High VIF values indicate high multicollinearity, which can lead to issues in the model's stability and interpretation. Generally, VIF values above 5 or 10 are considered problematic and may require further investigation.

  Based on the dataset (which is presented in section appendices) , there is no evidence of severe multicollinearity among the indicators. All indicators, including Frequency1 with a VIF of 2.459, have VIF values well below the problematic threshold of 5. This suggests that the model is relatively free from multicollinearity issues, which enhances the reliability of the parameter estimates and the model's overall stability.

2) Structural Model

- **Show the model image**

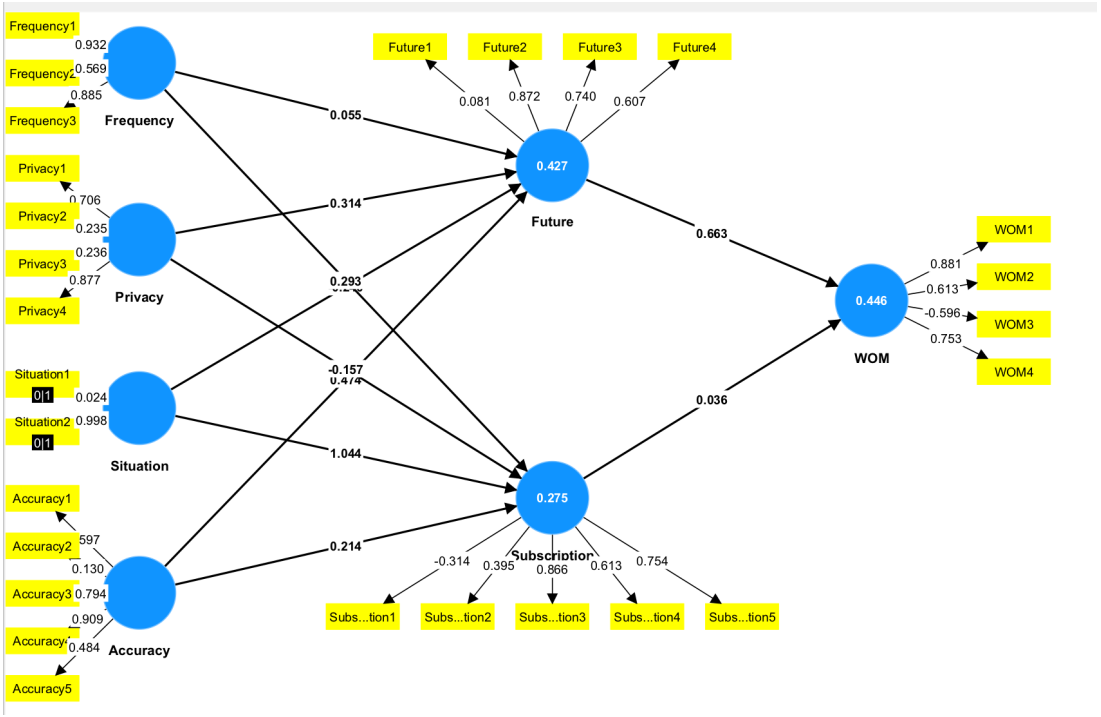

Fig.5 Model of SmartPLS

- **MODEL FIT**

1. SRMR (Standardised Root Mean Square Residual):

A lower SRMR value indicates a better fit, but both the saturated model (0.164) and the estimated model (0.168) have relatively high SRMR values, suggesting that there might be some discrepancies between the data and the model.

2. d_ULS (Degree of Unbiasedness of the Least Squares):

Both numbers are relatively high, indicating that the model may not completely reflect the covariance patterns in the data. The estimated model (11.476) has a slightly higher value than the saturated model (10.978), but both values are greater than the saturated model.

3. d_G (Degree of the Gradient of the Unbiasedness Function):

A greater value of d_G, like d_ULS, denotes a better fit and The values for d_G are near to the saturated model and the estimated model (8.224 and 8.291, respectively), although they are still quite high.

4. Chi-square:

The difference between the observed and expected covariance matrices is tested using the chi-square value. The chi-square value is very high, indicating an average fit, in both the estimated model (23065.544) and the saturated model (22874.365).

5. NFI (Normed Fit Index):

A better match is indicated by higher NFI values. Low NFI values for the estimated model (0.15), as well as the saturated model (0.157), point to an average fit relative to the baseline model.

The model exhibits an excellent fit, as seen by the low SRMR and d_G values, despite the model's complexity and the sample size's modest size. This may indicate that the estimated model can adequately describe the connections between the variables in the data.

R-SQUARE

1. Future:

According to these numbers, the "Future" latent variable's variance is explained by the model in about 43.7% of cases. The R-square adjusted (0.435) is nearly identical to the R-square (0.437), indicating that the complexity of the model has little impact on the amount of variance that is explained.

2. Subscription:

The R-square (0.385) for "Subscription" indicates that the model explains around 38.5% of the variance in this latent variable. The R-square adjusted (0.383), which takes into account the model's complexity, is slightly lower, suggesting a small reduction in the variance explained when considering the model's complexity.

3. WOM (Word of Mouth):

The model explains roughly 46.2% of the variation in the latent variable "WOM" according to the R-square (0.462). The R-square adjusted (0.461) is nearly identical to the R-square, indicating that the model's level of complexity has little effect on the variance explained.

R-Square values between 0.385 and 0.462 show that the model does an excellent job of explaining the variation in the dependent variables "Future," "Subscription," and "WOM." The explanatory power is not very high, but models that deal with complicated human behaviours and perceptions usually have explanatory powers that are similar to this one.

4. Discussion - Shravan/Malek/John

Bootstrapping – hypothesis testing (calculate – bootstrapping): it is shown in **Table 2**:

Table 2. Bootstrapping analysis

Column1	Original sample (O)	Sample mean (M	Standard deviation (STDE	T statistics (|O/STDEV|)	P values
Accuracy -> Future	0.606	0.533	0.218	2.785	0.005
Accuracy -> Subscription	0.363	0.242	0.359	1.011	0.312
Frequency -> Future	0.054	0.098	0.233	0.232	0.816
Frequency -> Subscriptic	0.189	0.245	0.278	0.68	0.497
Future -> WOM	0.611	0.637	0.154	3.971	0
Privacy -> Future	0.283	0.279	0.237	1.193	0.233
Privacy -> Subscription	0.36	-0.021	0.349	1.032	0.302
Subscription -> WOM	0.156	0.028	0.24	0.648	0.517
Usefulness -> Future	-0.254	-0.032	0.245	1.037	0.3
Usefulness -> Subscripti	-0.192	-0.069	0.55	0.349	0.727

Interpretation of Findings: Provides a detailed interpretation and discussion of the results obtained. This includes relating the findings to the research questions, theoretical framework, and previous research. It may involve identifying significant patterns, relationships, or trends in the data.

1) For "Accuracy -> Future" and "Future -> WOM" paths, the p-values are very low (0.005 and 0, respectively), indicating strong evidence to reject the null hypothesis. These relationships are likely significant, suggesting that Accuracy has a significant impact on Future and Future has a significant impact on WOM.
2) For "Accuracy -> Subscription," "Frequency -> Future," "Privacy -> Subscription," and "Usefulness -> Future" paths, the p-values are greater than 0.05 (commonly used significance level), indicating insufficient evidence to reject the null hypothesis. These relationships are likely not significant, suggesting that there might not be a significant impact.
3) For the other paths, such as "Frequency -> Subscription," "Privacy -> Future," "Subscription -> WOM," and "Usefulness -> Subscription," the p-values are also greater than 0.05, indicating no significant evidence to reject the null hypothesis for these relationships.

Limitations:

The fact we didn't have enough time to diversify the range of people that answered our study may impact the generalizability of our findings.

Indeed, conducting a survey on the use of ChatGPT among AI students can create potential biases in the data collected due to their background and field of study. AI students are likely to have a deeper understanding of the underlying technology and its capabilities, leading to higher willingness to use ChatGPT as a tool for their academic pursuits and projects. They may also perceive it as more useful since they can leverage its functionalities for various AI-related tasks and experiments. On the other hand, if the survey were conducted on Art students, their familiarity with AI and natural language processing might be comparatively lower. As a result, they may not perceive ChatGPT as significantly beneficial to their artistic endeavours and creative processes, potentially leading to lower interest and utilisation rates. To address this bias, it's essential to conduct surveys across diverse user groups, including individuals from different academic backgrounds, industries, and fields of interest, to gain a more balanced and comprehensive understanding of ChatGPT's applicability and impact across various user demographics.

Implications:

This quantitative analysis report on students' attitudes towards Generative AI tools, particularly ChatGPT, reveals valuable implications for their integration in academic and personal contexts. The findings indicate a generally positive attitude towards ChatGPT's functionality, emphasising the need for continuous improvement to meet user needs effectively. Addressing privacy and security concerns is crucial to build user trust and promote wider adoption. Educating users about the benefits and responsible usage of these tools can increase interest and acceptance. To ensure inclusivity, diverse user groups should be targeted to assess the applicability of Generative AI tools across various academic disciplines and industries. Balancing premium features with affordability is essential for sustainable monetization. Long-term impact assessment and collaboration with educators and policymakers are vital to fostering responsible AI integration in education. Continuous development, user-centric design, and exploring new use cases can enhance tool relevance and user satisfaction. Ethical considerations, training, and support, as well as interdisciplinary research, contribute to a holistic understanding and responsible use of Generative AI tools in education.

5. Conclusion -Henri

In conclusion, this quantitative study aimed to explore students' experiences and perceptions of using ChatGPT in educational settings. The findings provide valuable insights into how students utilise AI-based tools for academic purposes and shed light on the factors that influence their satisfaction and future intentions with ChatGPT.

The results indicate that ChatGPT is well-received among students, with a majority expressing positive satisfaction levels. The technology is used for various academic tasks, including content generation, problem-solving, and academic assistance. Moreover, most participants expressed an intention to continue using ChatGPT beyond their educational journey, suggesting its potential as a valuable tool for their future professional careers.

Word-of-mouth recommendations emerged as a critical factor in the adoption of ChatGPT, highlighting the significance of social influence in technology usage decisions. Ethical considerations were well-addressed in the study, ensuring participants' confidentiality and privacy during the data collection process.

The study also acknowledges certain limitations, such as the relatively small sample size and the focus on masters students, which may limit the generalizability of the findings. The reliance on self-reported data and the lack of qualitative insights could have limited a deeper understanding of students' experiences with ChatGPT.

From this study, it is possible to imagine the future use of ChatGPT. The positive satisfaction levels and intentions to continue using ChatGPT suggest that integrating AI-based tools into educational curricula has the potential to enhance students' learning experiences. Educators can benefit from these insights to design effective AI-integrated teaching strategies. By examining students' interactions with ChatGPT, it offers valuable insights into the

implications of AI-based tools for educational practices and student learning experiences. With continued research and responsible implementation, AI technologies like ChatGPT hold the potential to revolutionise education and support learners in their academic and professional pursuits.

References

Google Forms. (n.d.). *Google Forms*. Retrieved from Google Forms: https://www.google.com/forms/about/

SmartPLS. (n.d.). *SmartPLS*. Retrieved from SmartPLS: https://www.smartpls.com/

Appendices

Results of SEM-PLS statistics:

	Accuracy	Frequency	Future	Privacy	Subscription	Usefulness	WOM
Accuracy1	0.640						
Accuracy2	0.293						
Accuracy3	0.700						
Accuracy4	0.914						
Accuracy5	0.293						
Frequency2		0.552					
Frequency3		0.884					
Future1			0.047				
Future2			0.884				
Future3			0.737				
Future4			0.591				
Privacy1				0.607			
Privacy2				0.047			
Privacy3				0.310			
Privacy4				0.888			
Subscription1					0.669		
Subscription2					0.006		
Subscription3					0.613		
Subscription4					-0.011		
Subscription5					-0.021		
Usefulness1						0.507	
Usefulness2						0.264	
Usefulness3						0.934	
WOM1							0.874
WOM2							0.615
WOM3							-0.599
WOM4							0.759
Frequency1		0.939					

Fig.6 Results of Outer Loading

	Accuracy	Frequency	Future	Privacy	Subscription	Usefulness	WOM
Accuracy							
Frequency	0.561						
Future	0.678	0.493					
Privacy	0.706	0.827	0.663				
Subscription	0.445	0.369	0.476	0.539			
Usefulness	1.220	0.765	0.684	0.856	0.853		
WOM	0.909	0.361	0.969	0.537	0.419	1.054	

Fig.7 Discriminant validity

	VIF
Accuracy1	1.439
Accuracy2	1.190
Accuracy3	1.880
Accuracy4	2.041
Accuracy5	1.400
Frequency2	1.309
Frequency3	2.051
Future1	1.075
Future2	1.263
Future3	1.328
Future4	1.283
Privacy1	1.275
Privacy2	1.137
Privacy3	1.073
Privacy4	1.101
Subscription1	1.333
Subscription2	1.272
Subscription3	1.272
Subscription4	1.572
Subscription5	1.913
Usefulness1	1.124
Usefulness2	1.003
Usefulness3	1.125
WOM1	1.777
WOM2	1.256
WOM3	1.252
WOM4	1.648
Frequency1	2.459

Fig.8 Collinearity statistics (VIF)

	Saturated model	Estimated model
SRMR	0.164	0.168
d_ULS	10.978	11.476
d_G	8.224	8.291
Chi-square	22,874.365	23,065.544
NFI	0.157	0.150

Fig.9 Model Fit

	R-square	R-square adjusted
Future	0.437	0.435
Subscription	0.385	0.383
WOM	0.462	0.461

Fig.10 R-Square

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
Accuracy -> Future	0.606	0.533	0.218	2.785	0.005
Accuracy -> Subscription	0.363	0.242	0.359	1.011	0.312
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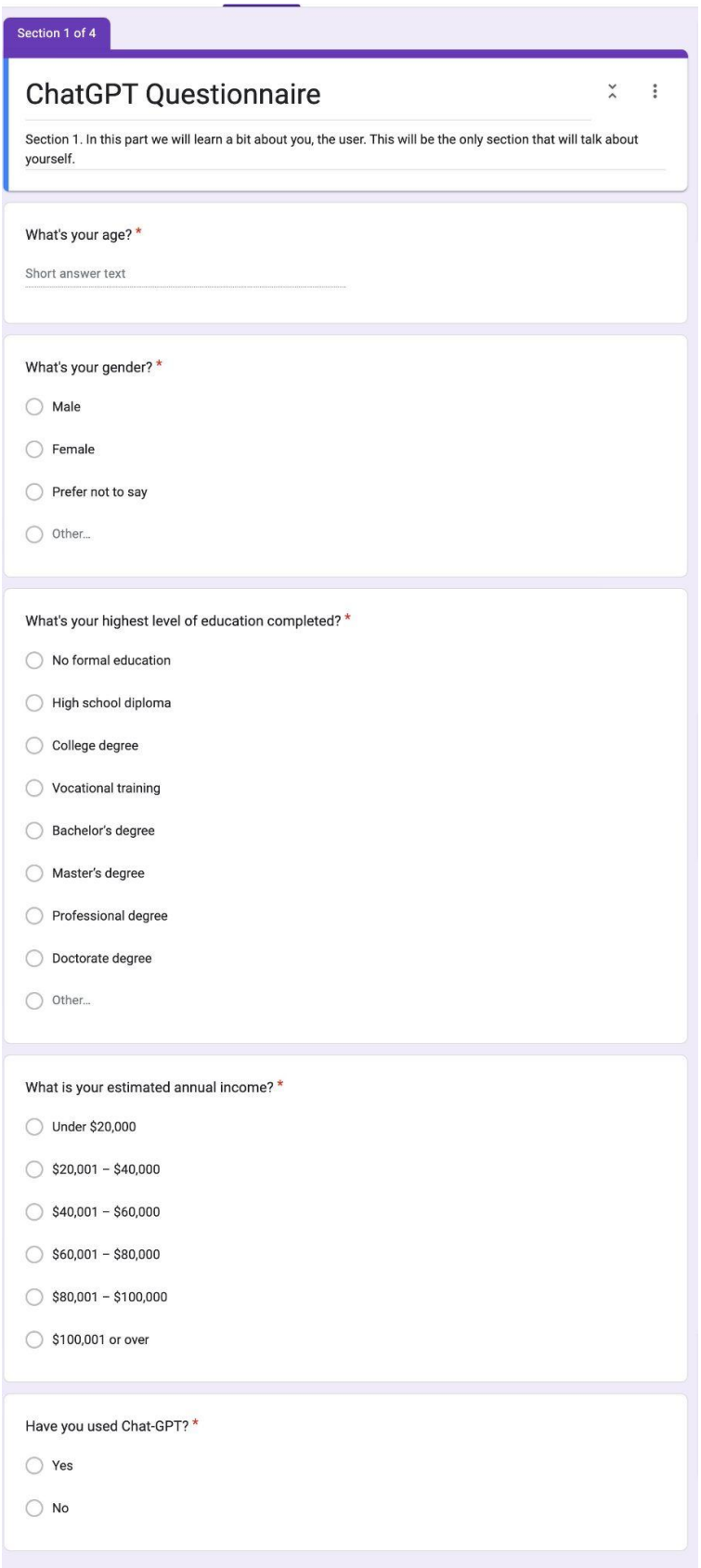
Privacy -> Subscription	0.360	-0.021	0.349	1.032	0.302
Subscription -> WOM	0.156	0.028	0.240	0.648	0.517
Usefulness -> Future	-0.254	-0.032	0.245	1.037	0.300
Usefulness -> Subscription	-0.192	-0.069	0.550	0.349	0.727

Fig.11 Path Coefficient

Questionnaires:



Section 1 of 4

ChatGPT Questionnaire

Section 1. In this part we will learn a bit about you, the user. This will be the only section that will talk about yourself.

What's your age? *

Short answer text

What's your gender? *

- Male
- Female
- Prefer not to say
- Other...

What's your highest level of education completed? *

- No formal education
- High school diploma
- College degree
- Vocational training
- Bachelor's degree
- Master's degree
- Professional degree
- Doctorate degree
- Other...

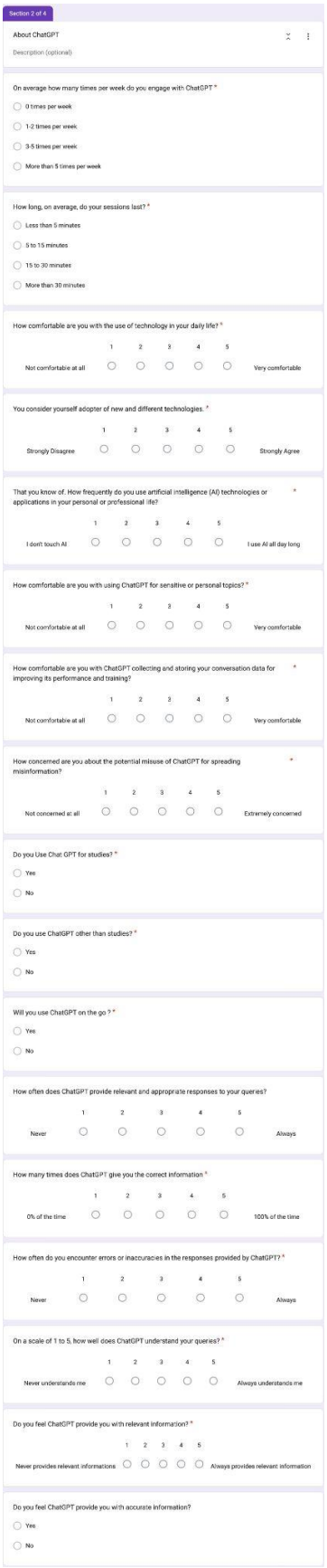
What is your estimated annual income? *

- Under $20,000
- $20,001 – $40,000
- $40,001 – $60,000
- $60,001 – $80,000
- $80,001 – $100,000
- $100,001 or over

Have you used Chat-GPT? *

- Yes
- No

Fig.12 Questionnaire 1



Section 2 of 4

About ChatGPT

Description (optional)

On average how many times per week do you engage with ChatGPT? *

- 0 times per week
- 1-2 times per week
- 3-5 times per week
- More than 5 times per week

How long, on average, do your sessions last? *

- Less than 5 minutes
- 5 to 15 minutes
- 15 to 30 minutes
- More than 30 minutes

How comfortable are you with the use of technology in your daily life? *

1 2 3 4 5

Not comfortable at all — Very comfortable

You consider yourself adopter of new and different technologies. *

1 2 3 4 5

Strongly Disagree — Strongly Agree

That you know of. How frequently do you use artificial intelligence (AI) technologies or applications in your personal or professional life? *

1 2 3 4 5

I don't touch AI — I use AI all day long

How comfortable are you with using ChatGPT for sensitive or personal topics? *

1 2 3 4 5

Not comfortable at all — Very comfortable

How comfortable are you with ChatGPT collecting and storing your conversation data for improving its performance and training? *

1 2 3 4 5

Not comfortable at all — Very comfortable

How concerned are you about the potential misuse of ChatGPT for spreading misinformation? *

1 2 3 4 5

Not concerned at all — Extremely concerned

Do you Use Chat GPT for studies? *

- Yes
- No

Do you use ChatGPT other than studies? *

- Yes
- No

Will you use ChatGPT on the go ? *

- Yes
- No

How often does ChatGPT provide relevant and appropriate responses to your queries?

1 2 3 4 5

Never — Always

How many times does ChatGPT give you the correct information *

1 2 3 4 5

0% of the time — 100% of the time

How often do you encounter errors or inaccuracies in the responses provided by ChatGPT? *

1 2 3 4 5

Never — Always

On a scale of 1 to 5, how well does ChatGPT understand your queries? *

1 2 3 4 5

Never understands me — Always understands me

Do you feel ChatGPT provide you with relevant information? *

1 2 3 4 5

Never provides relevant informations — Always provides relevant information

Do you feel ChatGPT provide you with accurate information?

- Yes
- No

Fig.13 Questionnaire 2

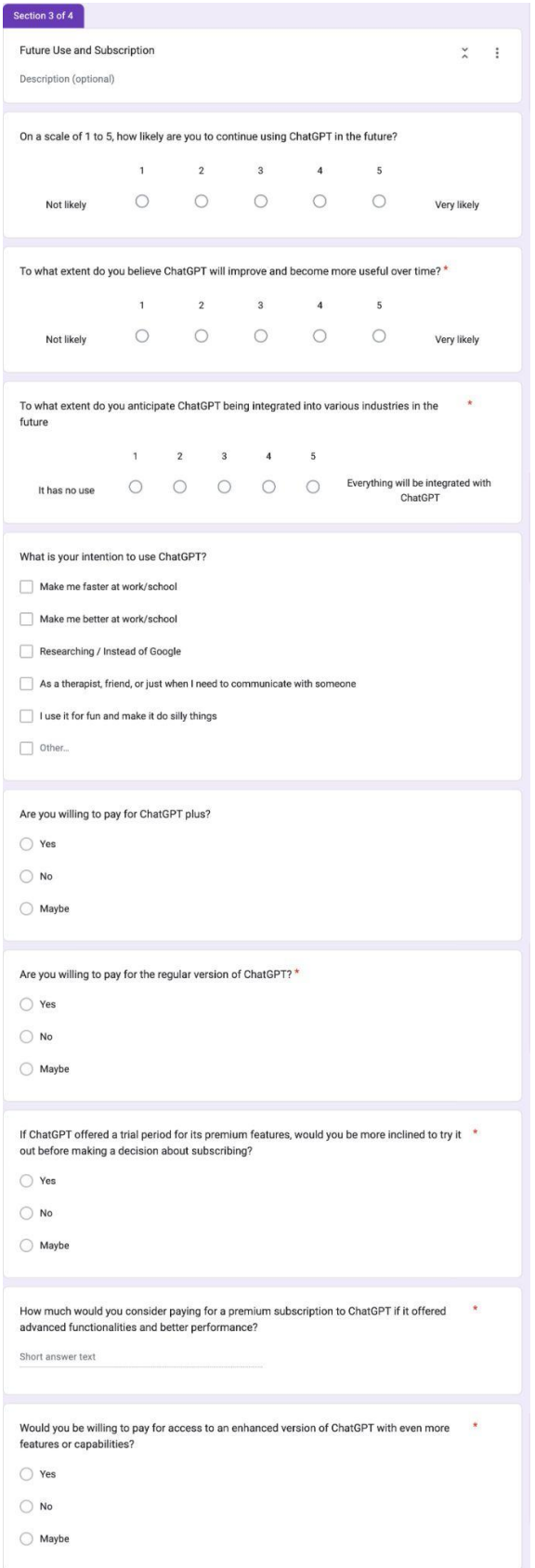


Fig.14 Questionnaire 3

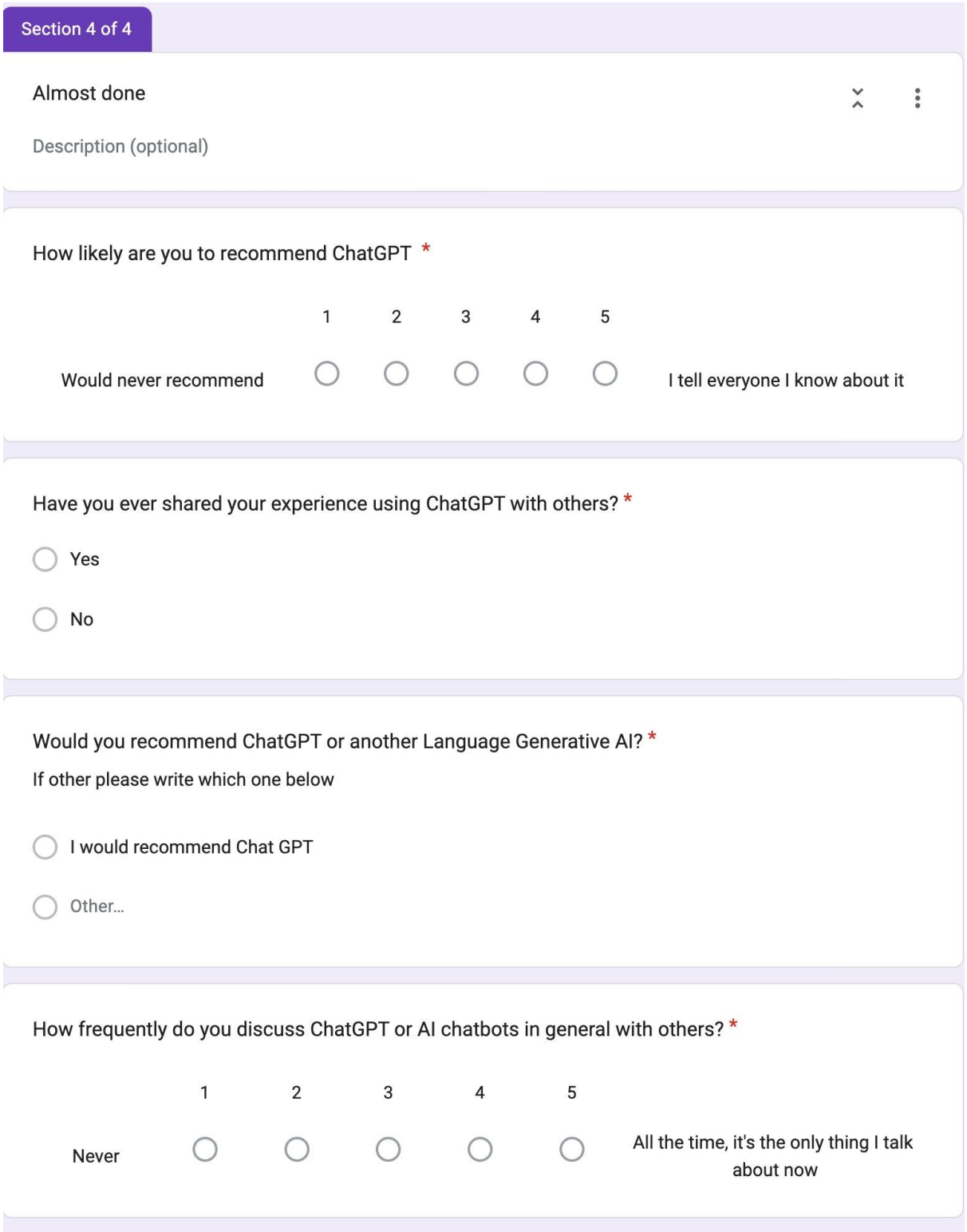


Fig.15 Questionnaire 4