

UNITED KINGDOM · CHINA · MALAYSIA

# Examining the privacy invasiveness of data-capturing questions through interval-valued questionnaires

Thank you for agreeing to participate in this research project. This research is conducted by (principal investigator) from the division of marketing in the Nottingham University Business School. This project is funded by the University of Nottingham and results from this study will be published to academic journals with the primary intention being to inform professionals and other academics on how to acquire consumer information through more efficient and ethically correct data-capturing methods.

In this questionnaire you will be asked to rate a series of privacy related questions in terms of their intrusiveness and the overall process will take approximately 20-30 minutes to complete.

The objective of this study is to assess how adult individuals perceive questions related to their privacy with different levels of privacy invasiveness. Additionally, this research seeks to embrace the importance of voluntary disclosure of information by individuals through explicit means while limiting the use of unethical and implicit oriented data-collection methods.

Your responses will remain anonymous. This questionnaire ensures full anonymity for all the provided information. Your participation is entirely voluntary, and you may change your mind about being involved in the research at any time, and without giving a reason. Only the researcher will have access to all data collected from this research. Additionally, all hard and soft copies of the acquired data will be safely stored and protected. All soft copies of the data will be held in password protected documents while all hard copies shall be held in locked cabinets at the principal investigator's office for a period of 5 years.

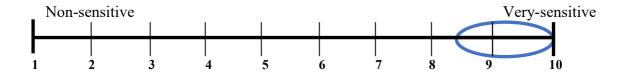
The present study is conducted according to the ethical standards of the Nottingham University Business School's Research Ethics Committee which has also granted ethical approval.

If you have any questions about this study please contact the principal investigator Email: . If you have any ethical concerns regarding my participation in this study please contact the School's Research Ethics Officer, Email: .

## **MEASUREMENT**

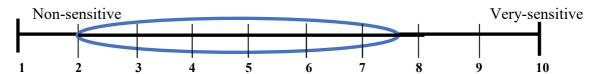
This questionnaire follows an interval-based measurement meaning that you mark your answer with a circle (ellipse) on the given interval. Here is a brief explanation on how this Interval valued scale works.

# The closer the ellipse on the right-hand side of the scale the more sensitive the asked question is.



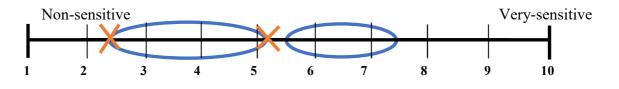
In the above example the answer indicates that the asked question is perceived as very sensitive. When the ellipse is closer to the left hand side then the asked questions is considered to be less sensitive. The ellipse in the example above is also narrow indicating that the response is relatively certain.

#### The wider the ellipse the higher the uncertainty in the answer



This is an example of an uncertain answer that is closer to the left-hand side.

If you make a mistake or wish to change your answer, make a cross at each end of the ellipse you would like to discard and re-state your answer with a new ellipse as shown below.



## **SCENARIO**

An organisation whose main activities revolve around the acquisition of consumer information seeks to capture personal information about consumers based on the following 18 questions for consumer profiling purposes. The organisation agreed not to share this data with any 3<sup>rd</sup> parties. Please rate the following questions based on how sensitive you consider them to be.

Please DO NOT answer the following questions but instead rate them based on how invasive you consider them to be.

# **SECTION A**

1. How many times do you go to a restaurant in an average week?

How invasive/intrusive do you feel this question is?

Non-invasive

Very invasive



2. Have you claimed to have education that you didn't actually have (either on your CV or in person)?

How invasive/intrusive do you feel this question is?

Non-invasive

Very invasive

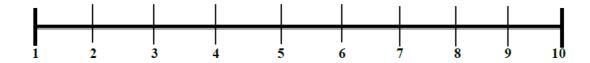


3. Have you ever suffered from cancer of any kind?

How invasive/intrusive do you feel this question is?

Non-invasive

Very invasive

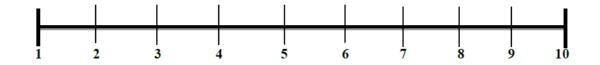


4. How often do you travel abroad either for holidays or business?

How invasive/intrusive do you feel this question is?

Non-invasive

Very invasive



5. Have you called in sick when you were not sick either in your workplace, university, etc.?

How invasive/intrusive do you feel this question is?

Non-invasive

Very invasive

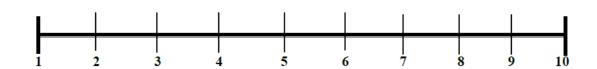


6. What is the total amount of your household savings?

How invasive/intrusive do you feel this question is?

Non-invasive

Very invasive



7. Have you downloaded illegally obtained (pirated) songs and/or movies from the internet?

Non-invasive Very invasive



8. Have you knowingly wasted energy, for example by not switching off the lights for convenience at your workplace, school or university?

How invasive/intrusive do you feel this question is?

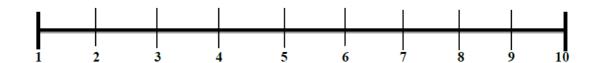
Non-invasive Very invasive



9. Have you known about or witnessed a serious crime and failed to report it or stop it?

How invasive/intrusive do you feel this question is?

Non-invasive Very invasive



10. Have you ever lied about your age to someone you were attracted to?

How invasive/intrusive do you feel this question is?

Non-invasive Very invasive



11. Have you ever tried illegal drugs like marijuana?

How invasive/intrusive do you feel this question is?

Non-invasive Very invasive



#### 12. Have you ever been arrested?

How invasive/intrusive do you feel this question is?



#### 13. Which mobile phone carrier do you currently use?

How invasive/intrusive do you feel this question is?



#### 14. Have you ever looked at pornographic material?

How invasive/intrusive do you feel this question is?



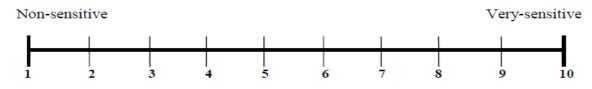
## 15. Have you lied about your income to an official service?

How invasive/intrusive do you feel this question is?



## 16. For which stores do you currently have loyalty cards?

How invasive/intrusive do you feel this question is?



#### 17. How much alcohol do you consume on average per week?

How invasive/intrusive do you feel this question is?



## 18. How many sexual partners have you had since you became sexually active?

How invasive do you feel this question is?



# **SECTION B**

How many questionnaires do you complete on average each year (online, face to face, mail questionnaires etc)									
1-10									
Below there is a series of examples of different scales used in questionnaires for capturing responses. Please indicate how familiar (used/came across) you are with each one.									
The coffee offered at Starbucks has a good flavour.									
2-point Likert (Dichotomy) scale									
Disagree (No) Agree (Yes)									
Are you familiar with the 2-point Likert scale? Please circle: YES NO									
3-point Likert scale									
Disagree Neutral Agree									
Are you familiar with the 3-point Likert scale? Please circle: YES NO									
5 point Likert scale									
Strongly Disagree Disagree Neutral Agree Strongly Agree									
Are you familiar with the 5-point Likert scale? Please circle: YES NO									
7-point Likert scale									
Strongly Disagree Somewhat Neutral Somewhat Agree Strongly Disagree Disagree Agree Agree									

Are you familiar with the 7-point Likert scale? Please circle: YES NO											
10-point Semantic differential scale											
Easy	1	2	3	4	5	6	7	8	9	10	Difficult
I	Are you	familia	r with th	ne 10-po	oint Li	kert sca	ale?	Please	circle:	YES	NO
Interval based questionnaires											
Disa	igree										Agree
Are you familiar with the interval scale? Please circle: YES NO											
Please put in order the scales above starting with the one that you are most familiar with (used more often) to the ones that you have used less frequently or not at all. Please put the appropriate number next to the scales below from 1 to 6 with 1 being the most frequently used.											
2-Point Likert  3-Point Likert  5-Point Likert  7-Point Likert  10-Point Semantic Differential  Interval based scale											

Based on the familiarity and previous experiences you had with any of the above scales please answer the following questions regarding the 10-point interval valued scale you have used in **Section A** of this questionnaire.

How easy did you find the use of the 10-point Interval scale when assessing the intrusiveness of the questions above?											
Easy			-	4			7	8	9	10	Difficult
How questio		id you	find 1	the us	e of t	he 10	-point	t Inte	rval	scale i	n the above
Quick	1	2	3	4 □ [	5 □ [	6	7	8	9	10 Tim	ne consuming
The 10-	-point	Interv	al sca						with	my an	swers.
Agree		2	3	4	5	6	7	8	9	10	Disagree
The 10-	-point	Interv	al sca	le allo	ws mo	e to b	e mor	e cert	tain v	vith m	y answers
Agree	1	2	3	4	5	6	7	8	9	10	Disagree
The 10-feelings	_			le allo	wed t	he ex	pressi	on of	my e	xact tl	noughts and
Agree	1	2	3	4	5	6	7	8	9	10	Disagree
Overall I am satisfied with the use of the 10-point Interval scale for providing my answers in the above questions regarding privacy invasiveness.											
Agree	1	2	3	4	5	6	7	8	9	10	Disagree

# **SECTION C**

## **Demographics** 1. Gender ☐ Male ☐ Female ☐ Other 2. Age:\_\_\_\_ 3. Highest Educational background Secondary school Certificate Bachelors degree Masters degree Member of a certified or chartered association 7 PhD 4. Ethnical origin White Hispanic or Latin Black Native American Indian Asian Other. Please state

Prefer not to disclose

THANK YOU FOR PARTICIPATING IN THIS RESEARCH