Wave 1

Start of Block: ConsentDemogs

Study Information **PARTICIPANT INFORMATION SHEET & CONSENT FORM 1.Protocol title** Understanding Digital Media and Surveys Protocol No: **NUS-IRB-2023-781 2.Principal Investigator and co-investigator(s), if any, with the contact number and organization:** Principal Investigator: Dr Ozan Kuru Department of Communications and New Media National University of Singapore okuru@nus.edu.sg: Phone: +65 66016593 **3.What is the purpose of this research?** You are invited to participate in a research study. This information sheet provides you with key purposes and context of this research. You can contact the The Principal Investigator (the person in charge of this research) for your questions. Read the information below before deciding whether or not to take part. The purpose of this research is to understand whether and how individual engage with information in the media including surveys and other reports. **4.Who can participate in the research? What is the expected duration of my participation? What is the duration of this research?** You can participate in the research if you are a citizen or permanent resident in Singapore and aged 21 years and above. The survey will be conducted in English. You participation is expected to take approximately 25 minutes in total (15 minutes for first survey and 10 minutes for second survey). The duration of the entire research project is approximately 12 months. **5.What is the approximate number of research participants involved?** Approximately 2400 research participants are involved. **6.What will be done if I take part in this research study?** This research is composed of two different surveys. We will contact you again about 7 to 10 days after you complete the first survey. Each of the surveys will take about 10 to 15 minutes In this first survey, after first answering a series of questions on your demographics, beliefs, attitudes, you will be asked to read some section message and then respond to a series of questions using this online survey platform. Some research designs require that the full extent of the study not be explained prior to participation. Although we have described the general nature of the tasks that you will be asked to perform, the full intent of the study will not be explained to you until after the completion of the study. In the second survey, which is shorter than the first one as explained above, you will answer similar questions such as those about your beliefs and attitudes. At the end of second survey, we will provide you with a full debriefing which will include an explanation of the hypothesis that was tested and other relevant background information pertaining to the study. You will also be given an opportunity to ask any questions you have about the hypothesis and the procedures used in the study. **7.How will my privacy and the confidentiality of my research records be protected?** Only the principal investigator and the survey company has access to your demographic information and this will not be released to any other person, including members of the research team. No personal data will be collected from you. Your research data will be coded via your survey company ID and you will not be personally identifiable to the researcher. All data collected will be kept in accordance to the National University of Singapore's Research Data Management Policy. Research data used in any

publication will be kept in secure files for a minimum of 10 years before being discarded.
8.What are the possible discomforts and risks for participants? Discomforts and risks for participants in general are minimal and unlikely. However, in the unlikely event that you feel uncomfortable and do not want to answer some of the more personal questions such as ideology and income levels, you will be given the option of selecting “Do not want to respond” or for some questions you can progress to the next question in the survey without responding to that question. If you feel uncomfortable for questions that request a response, you can withdraw from the survey anytime without completing it. **9.What is the compensation for any injury?** Injury and compensation as a result of this research is not expected. If you follow the directions of the PI in charge of this research study and you are injured, the NUS will pay the medical expenses for the treatment of that injury. By giving your consent, you will not waive any of your legal rights or release the parties involved in this study from liability for negligence. **10.Will there be reimbursement for participation?** You will be reimbursed by the survey company as per the industry standard rate for participation in such study upon verification that you have completed the study. Note that you will get reimbursed for both surveys separately. If you accept the invitation and take the second survey, you will be reimbursed for that separately following your completion of the second survey. Note that surveys also contain attention check questions and participants will not be reimbursed if they fail to answer those questions correctly (as they will be removed from the study). **11.What are the possible benefits to me and to others?** There is no substantive direct benefit to you by participating in this research study. However, you may learn more about surveys. The knowledge gained may benefit the public in the future. The debriefing section will provide useful information for your own informational engagement. **12.Can I refuse to participate in this research?** Yes, you can. Your decision to participate in this research study is voluntary and completely up to you. You can also withdraw from the research at any time during the survey until its completion without giving any reasons, and all data collected from you will be discarded. At the very end of the survey, there is a section where you can indicate if you want to withdraw all your data as well. This process is completely anonymous as well. **13.Whom should I call if I have any questions or problems?** Please contact the Principal Investigator, Dr Ozan Kuru (via email okuru@nus.edu.sg or telephone +65 66016593) for all research-related matters and in the event of research-related injuries. You can contact the PI for your questions before agreeing to this consent form as well.
For an independent opinion specifically regarding the rights and welfare of research participants, you may contact a staff member of the National University of Singapore Institutional Review Board at telephone (+65) 6516 1234 [Mondays to Thursdays from 8.30am to 6pm, and Fridays from 8.30am to 5.30pm, except public holidays] or email at irb@nus.edu.sg.
${e://Field/id}

Consent **Consent Form** Protocol title: Understanding Digital Media and Surveys **Protocol No:** NUS-IRB-2023-781 **Principal Investigator with the contact number and organization:** Principal Investigator: Dr Ozan Kuru Department of Communications and New Media National

University of Singapore okuru@nus.edu.sg: Phone: +65 66016593 **I hereby acknowledge that:** 1.I have agreed to take part in the above research. 2.I have received a copy of this information sheet that explains the use of my data in this research. I understand its contents and agree to donate my data for the use of this research. 3.I can withdraw from the research at any time during the survey until its completion, by informing the Principal Investigator, and all my data collected will be discarded. I will still be given the option to withdraw my data immediately after completing the surveys. 4.I will not have any financial benefits that result from the commercial development of this research. **Check the box to indicate your reply:**

- ○ I have read the Participant Information Sheet and **I agree to participate in this research study (proceed to study).** (1)
- ○ I do not agree to participate in this research study. (2)

Page Break

Age How old are you? Please write in numbers.

_____

Sex Are you:

- Male (1)
- Female (2)
- Other (3)

RaceSG What is your ethnicity?

- Chinese (1)
- Malay (2)
- Indian (3)
- Other (4)

EducationSG What is the highest level of school you have completed or the highest degree you have received?

- ○ Primary school or less (1)
- ○ Some high school but no diploma (2)
- ○ High school graduate (3)
- ○ Some college but no degree (4)
- ○ Polytechnic (5)
- ○ Bachelor's degree in college (4-year) (6)
- ○ Master's degree (7)
- ○ Doctoral degree (8)
- ○ Professional degree (9)

Income Last year -- that is, in 2022 -- what was the average MONTHLY income of all the people living in your house or apartment BEFORE taxes in Singaporean Dollars (SGD)?

- ○ $1000 or less (1)
- ○ $1001 to $3000 (2)
- ○ $3001 to $5000 (3)
- ○ $5001 to $7000 (4)
- ○ $7001 to $9000 (5)
- ○ $9001 to $11000 (6)
- ○ $11001 to $13000 (7)
- ○ $13001 to $15000 (8)
- ○ $15001 to $17000 (9)
- ○ $17001 to $20000 (10)
- ○ $20001 to $25000 (11)
- ○ More than $25000 (12)
- ○ Do not want to respond (14)

Page Break

info IMPORTANT: 1. Please complete our survey **at one sitting at a quiet place.** 2. Once you complete questions on a page, proceed to next page. You **cannot go back to previous page**. 3. In order to proceed to the next page, **wait for the proceed button to show up**. At a few places during this survey, there is a minimum time you need to spend on a page before being able to proceed to the next session, so the proceed button will not show up immediately.

pledge
We care about the quality of our data. In order for us to get the most accurate measures of your opinions, it is important that you thoughtfully provide your best answers to each question in this survey.

Do you commit to thoughtfully provide your best answers to each question in this survey?

- ○ I will provide my best answers (1)
- ○ I will not provide my best answers (4)
- ○ I can't promise either way (5)

End of Block: ConsentDemogs

Start of Block: PollInterest

definition
Please read:

What is a survey / poll ? When covering issues and news, media organizations frequently refer to **surveys and public opinion or election polls.** A **survey / poll** is a report on a systematic and scientific analysis of public opinion. It provides information about public's preferences such as voting intentions in an upcoming election, views about a particular policy position, beliefs about issues or support for political leaders etc. It may be on any topic, such as politics, health, economy, and education etc. **Example survey / poll finding:** "A poll finds that majority of the public (57%) is optimistic about the economy in the next year."

Q536 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

interest1 How interested are you in reading survey / poll findings?

- ○ Not at all interested (1)
- ○ A little interested (2)
- ○ Somewhat interested (3)
- ○ Very interested (4)
- ○ Extremely interested (5)

interest2 How frequently do you read survey / poll findings?

- ○ Never (1)
- ○ Rarely (2)
- ○ Sometimes (3)
- ○ Frequently (4)
- ○ Very frequently (5)

interest3 How much attention do you give to survey / poll findings that are mentioned in news articles or in other media?

- ○ No attention at all (1)
- ○ A little attention (2)
- ○ Some attention (3)
- ○ Considerable attention (4)
- ○ A lot of attention (5)

Q537 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

End of Block: PollInterest

Start of Block: Pretest_Poll

pre_credible How credible do you find survey/poll findings in the media in general?

- Not at all credible (1)
- A little credible (2)
- Somewhat credible (3)
- Very credible (4)
- Extremely credible (5)

Page Break

pre_concern1 How risky is the possibility that surveys/polls can manipulate and mislead people?

- ○ Not at all risky (1)
- ○ A little risky (2)
- ○ Somewhat risky (3)
- ○ Very risky (4)
- ○ Extremely risky (5)

Page Break

pre_efficacy1 How confident are you in understanding survey/poll findings in the media?

- Not at all confident (1)
- A little confident (2)
- Somewhat confident (3)
- Very confident (4)
- Extremely confident (5)

End of Block: Pretest_Poll

Start of Block: AttentionCheck1andTrustinScience

AC1 This is a question to check your attention. You must select the response option that is in the middle. It is the fourth response option. It is the one between "Slightly agree" and "Slightly disagree".

- Completely agree (1)
- Somewhat agree (2)
- Slightly agree (3)
- Neither agree nor disagree (4)
- Slightly disagree (5)
- Somewhat disagree (6)
- Completely disagree (7)

End of Block: AttentionCheck1andTrustinScience

Start of Block: Pretest_Vax

Q581 Now we focus on **COVID-19 vaccines**:

VaxRisk1 How risky do **you** think the side effects of COVID-19 vaccines are?

- ○ Not risky at all (1)
- ○ A little risky (2)
- ○ Somewhat risky (3)
- ○ Very risky (4)
- ○ Extremely risk (5)

VaxRisk2 How concerned are **you** about the side effects of COVID-19 vaccines?

- ○ Not concerned at all (1)
- ○ A little concerned (2)
- ○ Somewhat concerned (3)
- ○ Very concerned (4)
- ○ Extremely concerned (5)

VaxRisk3 How worried are **you** about the side effects of COVID-19 vaccines?

- ○ Not worried at all (1)
- ○ A little worried (2)
- ○ Somewhat worried (3)
- ○ Very worried (4)
- ○ Extremely worried (5)

Q546 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

VaxPercept1
Now please focus on **what other people think about the side effects of COVID-19 vaccines.**

How risky do you think **most people in the country** find the side effects of COVID-19 vaccines?

- ○ Not risky at all (1)
- ○ A little risky (4)
- ○ Somewhat risky (2)
- ○ Very risky (5)
- ○ Extremely risky (3)

VaxPercept2
Now please focus on **what other people think about the side effects of COVID-19 vaccines.**

How concerned do you think **most people in the country** are about the side effects of COVID-19 vaccines?

- ○ Not concerned at all (1)
- ○ A little concerned (4)
- ○ Somewhat concerned (2)
- ○ Very concerned (5)
- ○ Extremely concerned (3)

VaxPercept3
Now please focus on **what other people think about the side effects of COVID-19 vaccines.**

How worried do you think **most people in the country** are about the side effects of COVID-19 vaccines?

- ○ Not worried at all (1)
- ○ A little worried (4)
- ○ Somewhat worried (2)
- ○ Very worried (5)
- ○ Extremely worried (3)

Q547 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

VaxPercept4
Now please focus on **what other people think about the side effects of COVID-19 vaccines.**

What portion of the general public in the country do you think is concerned about the side effects of COVID-19 vaccines?

- 9% or less (1)
- 10% to 19% (2)
- 20% to 29% (3)
- 30% to 39% (4)
- 40% to 49% (5)
- About 50% (6)
- 50% to 59% (7)
- 60% to 69% (8)
- 70% to 79% (9)
- 80% to 89% (10)
- 90% or more (11)

Q548 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

Vax_Intent On a scale of 1 to 7, where 1 is "strongly unlikely" and 7 is "strongly likely", how likely is it for you to get a COVID-19 vaccine (or booster shots) in future if health authorities recommend it for your age group? Please indicate your preference as a likelihood.

- ○ 1) Strongly unlikely (1)
- ○ 2) (2)
- ○ 3) (6)
- ○ 4) Unsure (3)
- ○ 5) (4)
- ○ 6) (7)
- ○ 7) Strongly likely (5)

Q549 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

Vax_Overall Overall, how positive or negative do you feel towards COVID-19 vaccines?

- ○ Strongly negative (1)
- ○ Moderately negative (2)
- ○ Slightly negative (3)
- ○ Neutral (4)
- ○ Slightly positive (5)
- ○ Moderately positive (6)
- ○ Strongly positive (7)

End of Block: Pretest_Vax

Start of Block: Pretest_AI

Q582 Now we focus on **artificial intelligence (AI) technologies**:

AI_Risk1 How risky do **you** think the use of artificial intelligence (AI) technologies in settings such as work, school, and healthcare is?

- ○ Not risky at all (1)
- ○ A little risky (2)
- ○ Somewhat risky (3)
- ○ Very risky (4)
- ○ Extremely risk (5)

AI_Risk2 How concerned are **you** about the use of artificial intelligence (AI) technologies in settings such as work, school, and healthcare?

- Not concerned at all (1)
- A little concerned (2)
- Somewhat concerned (3)
- Very concerned (4)
- Extremely concerned (5)

AI_Risk3 How worried are **you** about the use of artificial intelligence (AI) technologies in settings such as work, school, and healthcare?

- Not worried at all (1)
- A little worried (2)
- Somewhat worried (3)
- Very worried (4)
- Extremely worried (5)

Q550 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

AI_Percept1
Now please focus on **what other people think about the use of artificial intelligence (AI) in our lives.**

How risky do you think **most people in the country** find the artificial intelligence (AI) technologies?

- ○ Not risky at all (1)
- ○ A little risky (4)
- ○ Somewhat risky (2)
- ○ Very risky (5)
- ○ Extremely risky (3)

AI_Percept2
Now please focus on **what other people think about the use of artificial intelligence (AI) in our lives.**

How concerned do you think **most people in the country** are about artificial intelligence (AI) technologies?

- ○ Not concerned at all (1)
- ○ A little concerned (4)
- ○ Somewhat concerned (2)
- ○ Very concerned (5)
- ○ Extremely concerned (3)

AI_Percept3
Now please focus on **what other people think about the use of artificial intelligence (AI) in our lives.**

How worried do you think **most people in the country** are about artificial intelligence (AI) technologies?

- ○ Not worried at all (1)
- ○ A little worried (4)
- ○ Somewhat worried (2)
- ○ Very worried (5)
- ○ Extremely worried (3)

Q551 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

AI_Percept4
Now please focus on **what other people think about the use of artificial intelligence (AI) in our lives.**

What portion of the general public in the country do you think is concerned about artificial intelligence (AI) technologies?

- ○ 9% or less (1)
- ○ 10% to 19% (2)
- ○ 20% to 29% (3)
- ○ 30% to 39% (4)
- ○ 40% to 49% (5)
- ○ About 50% (6)
- ○ 50% to 59% (7)
- ○ 60% to 69% (8)
- ○ 70% to 79% (9)
- ○ 80% to 89% (10)
- ○ 90% or more (11)

Q552 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

AI_PolicyView Would you support or oppose a policy proposal that aims to regulate more strictly the use of artificial intelligence (AI) technologies in settings such as work, school, and healthcare?

- ○ Strongly oppose regulation (1)
- ○ Moderately oppose regulation (2)
- ○ Slightly oppose regulation (3)
- ○ Neither oppose nor support regulation (4)
- ○ Slightly support regulation (5)
- ○ Moderately support regulation (6)
- ○ Strongly support regulation (7)

Q553 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

AI_Overall Overall, how positive or negative do you feel towards artificial intelligence (AI) technologies?

- ○ Strongly negative (1)
- ○ Moderately negative (2)
- ○ Slightly negative (3)
- ○ Neutral (4)
- ○ Slightly positive (5)
- ○ Moderately positive (6)
- ○ Strongly positive (7)

End of Block: Pretest_AI

Start of Block: AttentionCheck2

Filler1 Do you agree or disagree with the following statement: I am excited to learn more about scientific findings, because scientific findings help us understand the world in a more comprehensive way.

- ○ Completely agree (1)
- ○ Somewhat agree (2)
- ○ Slightly agree (3)
- ○ Neither agree nor disagree (4)
- ○ Slightly disagree (5)
- ○ Somewhat disagree (6)
- ○ Completely disagree (7)

AC2 You must select the second response option from the top. This is a question to check your attention. You must select the second option; it is the one between Completely agree and Slightly agree.

- ○ Completely agree (1)
- ○ Somewhat agree (2)
- ○ Slightly agree (3)
- ○ Neither agree nor disagree (4)
- ○ Slightly disagree (5)
- ○ Somewhat disagree (6)
- ○ Completely disagree (7)

End of Block: AttentionCheck2

Start of Block: NewsLitBehave

nlb1 When you are reading digital news articles on the Internet, how often do you...

	Never (1)	Rarely (2)	Sometimes (3)	Frequently (4)	Very frequently (5)
Cross-check with mass media sources like news agencies, newspapers, television (4)	○	○	○	○	○
Check different social media platforms regarding the information (6)	○	○	○	○	○
Cross check the information with online verification sites (7)	○	○	○	○	○

Q520 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

nlb2 When you are reading digital news articles on the Internet, how often do you...

	Never (1)	Rarely (2)	Sometimes (3)	Frequently (4)	Very frequently (5)
Read comments on the article to see if there is discussion about the veracity of information (1)	○	○	○	○	○
Check the sources cited/references in the story (2)	○	○	○	○	○
Examine the numerical and statistical information in detail (4)	○	○	○	○	○

Q522 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

nlb3 When you are reading digital news articles on the Internet, how often do you...

	Never (1)	Rarely (2)	Sometimes (3)	Frequently (4)	Very frequently (5)
Examine the publication date of the news story (1)	○	○	○	○	○
If provided, read the updates and changes to the news story (2)	○	○	○	○	○
Zoom into images and photos to examine if they are edited / photoshopped (3)	○	○	○	○	○

Q521 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

End of Block: NewsLitBehave

Start of Block: SubjNum

sn1 How good are you at working with **fractions**?

- Not at all good (1)
- A little good (2)
- Somewhat good (3)
- Very good (4)
- Extremely good (5)

sn2 How good are you at working with **percentages**?

- Not at all good (1)
- A little good (2)
- Somewhat good (3)
- Very good (4)
- Extremely good (5)

Q529 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

sn3 How good are you at **calculating a 15% tip**?

- Not at all good (1)
- A little good (2)
- Somewhat good (3)
- Very good (4)
- Extremely good (5)

sn4 How good are you at **figuring out how much a shirt will cost if it is 25% off**?

- Not at all good (1)
- A little good (2)
- Somewhat good (3)
- Very good (4)
- Extremely good (5)

Q523 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

sn5 When reading the newspaper, how helpful do you find **tables and graphs** that are parts of a story?

- Not at all helpful (1)
- A little helpful (2)
- Somewhat helpful (3)
- Very helpful (4)
- Extremely helpful (5)

sn6 When people tell you the chance of something happening, do you prefer that they use **words ("it rarely happens") or numbers ("there's a 1% chance")**?

- Always prefer words (1)
- Usually prefer words (2)
- Prefer words and numbers about equally (3)
- Usually prefer numbers (4)
- Always prefer numbers (5)

Q530 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

sn7 When you hear a weather forecast, do you prefer **predictions using words (e.g., "there is a small chance of rain today") or predictions using percentages (e.g., "there will be a 20% chance of rain today")?**

- Always prefer words (1)
- Usually prefer words (2)
- Prefer words and percentages about equally (3)
- Usually prefer percentages (4)
- Always prefer percentages (5)

sn8 How often do you find **numerical information** to be useful?

- Never (1)
- Rarely (2)
- Sometimes (3)
- Frequently (4)
- Very frequently (5)

Q531 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

End of Block: SubjNum

Start of Block: EverydayScienceLit

Q1 Alex is overweight and wants to find a research-proven method to lose weight.
In the next page, we will present 8 short questions about different aspects of Alex's search for an effective diet. For each question please answer: True or False.

Please provide your best guess if you are not sure.

Q2 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

sl1 Alex joins a clinical trial testing a new diet pill. Half of the participants receive the pill and half receive a placebo. Both Alex's doctor and the researchers know which group Alex belongs to, but Alex himself does not know. This situation is sufficient to examine the effectiveness of the new pill. True or False?

- ○ True (1)
- ○ False (2)

Q4 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

sl2 It has been proven that people who have a diet rich in cucumbers weigh 20% less than people who don't eat cucumbers at all. Therefore, Alex can conclude that eating cucumbers is helpful for weight loss. True or False?

- ○ True (1)
- ○ False (2)

Q6 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

sl3 As part of Alex's attempts to lose weight, he decides to stop eating in between meals and to run on the beach. A week later he finds out he lost 5 kg. Alex can determine with certainty the cause of his weight loss. True or False?

- ○ True (1)
- ○ False (2)

Q8 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

sl4 Alex has been on a diet for a month and in support of this process visits a dietician to check whether he has lost weight. The dietician suggests that Alex test the activity of his digestive system. Healthy and proper digestive system activity can serve as evidence to weight loss. True or False?

- ○ True (1)
- ○ False (2)

Q10 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

sl5 Alex read an article about a study regarding candy consumption. In the study, those who managed to resist the temptation and not eat the candy – won a weekend in a beach resort. Alex can conclude that if this method worked in the study, he could also use it in order to stop eating candies. True or False?

- ○ True (1)
- ○ False (2)

Q12 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

sl6 An ad agency wants to examine the effectiveness of their six-month campaign promoting a low protein diet. For this purpose, they administrate surveys before and after the campaign. During this time (and with no connection to the campaign), the media reported that the winner of a famous reality music competition had lost weight following a low protein diet. The survey at the end of the campaign showed an increase in awareness about low protein diets. Alex can conclude that the campaign increased the awareness about this diet. True or False?

- ○ True (1)
- ○ False (2)

Q14 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

sl7 Alex joins a weight loss support group which explores the effectiveness of two different dieting methods. All participants who weigh over 120 kg try method A and all participants under 120 kg try method B. This way the group can tell which method is more effective for losing weight. True or False?

- ○ True (1)
- ○ False (2)

Q16 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

sl8 Alex buys a new digital scale. First thing every morning he weighs himself wearing his pajamas, and each time he sees different results. The only reason to explain the different results, is that Alex gains and losses weight every day. True or False?

- ○ True (1)
- ○ False (2)

Q18 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

End of Block: EverydayScienceLit

Start of Block: AttentionBoost

boost2 What number do you get if you add 2 and 2? In other words, what does 2 + 2 equal to? Write the correct answer as a number.

_____

Page Break

boost3 This is a question to check your attention. You must select "Always" in order to be able to continue the survey.

- Never (1)
- Rarely (2)
- Sometimes (3)
- Usually (4)
- Always (5)

End of Block: AttentionBoost

Start of Block: c1_control

Q313 We are interested in your attitudes towards baseball in this section. **Please read carefully and fully.**

c1_1
Baseball Rules

"Baseball is a sport that dates back as far as 1744 and formats of the game have been in place until the modern era today. The game is predominantly big in North America, Canada and Japan. The game is played worldwide with the pinnacle of sport coming from the World Series of Baseball. Ironically, this event is only competed by North American teams."

timer8 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c1_2
Objective of the Game

"The objective of baseball is to score more runs than your opponent. The idea is to hit the ball thrown at you as far as you can before running around 4 bases to complete a run. Once a player manages to get around the four bases before being tagged out, then another batter steps in."

---

timer9 Timing
First Click (1)
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Page Submit (3)
Click Count (4)

Page Break

c1_3
Players & Equipment - Part 1

"A game is played out between two teams, each made up of 9 players. The game lasts for 9 innings with each team alternating between batting and fielding in each inning. The scores at the end of the innings are added to a cumulative score and the team with most points wins. Each team has three outs per inning before they then swap roles. Each inning can be broken down into the top (where the away team bats), and the bottom (where the home team bats). The field is split into two sections: infield and outfield. Separating the infield and outfield is a diamond shape with four bases, spaced at 90 feet apart each. In the center of the infield is the pitching mound where the pitcher stands and throws the ball toward the batter. The batter stands at the home plate. The other three bases are known as first base, second base and third base. The batter must touch all bases before successfully scoring a run."

timer10 Timing
First Click (1)
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Page Submit (3)
Click Count (4)

Page Break

c1_4
Players & Equipment - Part 2

"The bats are made out of either wood, aluminium or metal materials. The ball is white with red stitching and is roughly 3 inches in diameter. The fielding team wear ‘mits’, which are basically an oversized glove to help them catch and pick up the ball. The catcher (standing behind the batter to catch any balls missed) wears extra padding in their glove, along with leg guards, a body pad, and a helmet.

Scoring: To score, a batter must hit the ball with the bat into the designated fielding area and make it around all four bases (before the fielding team is able to collect the ball and throw it to the base the batter is running to). A player can score a mandatory point if they hit a home run, which usually means the ball has left the playing area, often landing in the crowd. A player can stop at any base if they feel they might not make it to the next base before being tagged out."

timer11 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c1_5
Players & Equipment - Part 3

"Players can score multiple points from one hit if more than one player is already on one of the bases. When you hear the phrase 'the bases are loaded', this refers to the instance where there is a player on every base. So, every time a batter successfully makes it to first base, the other players on the second and third bases are able to trickle home, earning a point for their team each time. Depending on how many players get around to home plate before being tagged will depend on how many points you score."

Q564 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c1_6
Players & Equipment - Part 4

"If the batter manages to hit the ball from the pitcher, they must make an effort to at least get to first base. They can then run to as many bases as they wish before being tagged out. Each base must be touched with some part of the batters body when running past.

A batter gets up to three strikes before getting out. A strike is deemed when a batter swings for a ball and misses it. The batter can leave the ball but, if it’s within a certain area (called the 'strike zone'), then a strike will also be given. If four balls miss the strike zone and the batter does not swing their bat, they can walk to first base. When on base, the batter can run to the next base at any point. "

Q565 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c1_7
Winning the Game

"To win a game, you must outscore your opposition through the 9 innings played. The team with the most points after 9 innings is deemed the winner. In the event of a tie, extra innings are played until a winner has been concluded." (Reference: <www.rulesofsport.com>)

timer12 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c1_baseballq1 We are interested in your attitudes towards baseball in this section. How likely are you to play baseball in future?

- Not at all likely (1)
- A little likely (2)
- Somewhat likely (3)
- Very likely (4)
- Extremely likely (5)

c1_baseballq2 How entertaining do you find baseball?

- Not at all entertaining (1)
- A little entertaining (2)
- Somewhat entertaining (3)
- Very entertaining (4)
- Extremely entertaining (5)

End of Block: c1_control

Start of Block: c2_passive_literacy

Q314 **Please read carefully and fully.**

c2_1

Methodological quality of surveys: While there are many surveys (polls) we encounter and read in media, surveys differ in their level of methodological quality (scientific strength). Some surveys are methodologically strong (**high quality**) while others are poor (**low quality**). High quality surveys provide more reliable and accurate statistical findings about the society while low quality surveys may be very misleading. There are a few key details to examine to

evaluate the methodological quality of surveys. These details are ideally provided together with survey results when they are presented in the media. **We should pay attention to these details while reading survey reports.**

timer13 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c2_2 **Population vs. Sample:** **Population** is the collective of individuals a survey attempts to understand. Depending on the scope and aim of a survey, it could be an entire country or retired individuals, for example. **Sample** is the collective of individuals who participate in a survey and are drawn from the population under study. A survey tries to understand a population by studying a sample of it (which is a very small segment of a population). This is similar to tasting a spoon of soup while we are cooking a pot of soup. Soup in spoon would be the sample and the soup in the pot is the population.

timer14 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c2_3 **Representativeness of a sample:** **Representativeness** refers to how well **the sample** of a survey captures **the population** under study. Some samples are representative. Representative samples are collected with **probability-based scientific random selection methods**, which gives every participant equal chance of being included. Probability-based, randomly selected samples capture the diversity in a population successfully and usually avoid bias. On the other hand, **non-probability based samples, such as convenience samples** of participants who are included in a survey without random selection, are **NOT** representative. Some types of individuals (for example, those who happened to be in a shopping mall where survey was conducted) may be over-represented in a convenience sample, creating a bias. Going with the soup example, in order to taste the soup more accurately while cooking, we usually mix the soup and sample a representative sample of it with the spoon. If we do not mix the soup first and only sample from the top of the pot, our spoon will not take a representative sample of the soup.

timer15 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c2_4

Sample size of a survey: **Sample size** refers to the number of individuals who participated in a survey. Generally, greater number of participants (**larger sample size**) provides more statistical reliability and confidence in the statistical findings. For example, it is very hard to provide reliable results for a country based on only 100 participants in a survey, because such a low sample size may not include any person with a particular demographic feature (for example, a female above 75 years old who has college degree education level). A sample of 1000 individuals at least is much better than, say, 100 individuals.

timer16 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c2_5 **Response rate in a survey:** When participants are invited to surveys, not everyone accepts the invitation. The ratio between invitations and completed surveys refers to the **response rate**. If response rates are too low, it might sometimes lead to a bias in the representativeness of a sample. A response rate of 35% is much better than a response rate of 5%. Also, if response rates are small and different for different types of individuals, it might also create a bias in survey results. For example, participants more interested in politics can have higher response rate in a political survey and this may bias the results (people with greater political interest being overly-represented in that survey).

timer17 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c2_6 **Precision of results: margin of error** **Margin of error** refers to variability in results of a statistical finding. Survey results do not give exact findings, but provide estimates within a possibility range. This range is determined by the size of margin of error. For example, **+/- 3% margin of error means** that a particular finding is within 3 points below and 3 points above the exact number. A finding that states 54% (with +/-3% margin of error) of the public supports a policy means that the exact public support level is highly likely somewhere within the range of 51% (54-3) to 57% (54+3). **A smaller margin of error is a stronger methodological quality indicator** because the survey finding is more precise, the finding is within a narrower range. A margin of error of 3% is much better than a margin of error of 6%.

timer18 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c2_7
Summary

1. Surveys that have **representative (probability-based) samples** 2. Surveys that have **larger sample size** 3. Surveys that have **higher response rate** 4. Surveys that have **lower margin of error**

tend to have stronger methodological quality and are more scientific, accurate, reliable than those surveys which do not have these properties.

Q474 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

End of Block: c2_passive_literacy

Start of Block: c3_active literacy

Q379 **Please read carefully and fully.**

c3_1
Methodological quality of surveys: While there are many surveys (polls) we encounter and read in media, surveys differ in their level of methodological quality (scientific strength). Some surveys are methodologically strong (**high quality**) while others are poor (**low quality**). High quality surveys provide more reliable and accurate statistical findings about the society while low quality surveys may be very misleading. There are a few key details to examine to evaluate the methodological quality of surveys. These details are ideally provided together with survey results when they are presented in the media. **We should pay attention to these details while reading survey reports.**

Q381 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c3_2 **Population vs. Sample:** **Population** is the collective of individuals a survey attempts to understand. Depending on the scope and aim of a survey, it could be an entire country or retired individuals, for example. **Sample** is the collective of individuals who participate in a survey and are drawn from the population under study. A survey tries to understand a population by studying a sample of it (which is a very small segment of a population). This is similar to tasting a spoon of soup while we are cooking a pot of soup. Soup in spoon would be the sample and the soup in the pot is the population.

Q383 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c3_3 **Representativeness of a sample:** **Representativeness** refers to how well **the sample** of a survey captures **the population** under study. Some samples are representative. Representative samples are collected with **probability-based scientific random selection methods**, which gives every participant equal chance of being included. Probability-based, randomly selected samples capture the diversity in a population successfully and usually avoid bias. On the other hand, **non-probability based samples, such as convenience samples** of participants who are included in a survey without random selection, are **NOT** representative. Some types of individuals (for example, those who happened to be in a shopping mall where survey was conducted) may be over-represented in a convenience sample, creating a bias. Going with the soup example, in order to taste the soup more accurately while cooking, we usually mix the soup and sample a representative sample of it with the spoon. If we do not mix the soup first and only sample from the top of the pot, our spoon will not take a representative sample of the soup.

Q385 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c3_4

Sample size of a survey: **Sample size** refers to the number of individuals who participated in a survey. Generally, greater number of participants (**larger sample size**) provides more statistical reliability and confidence in the statistical findings. For example, it is very hard to provide reliable results for a country based on only 100 participants in a survey, because such a low sample size may not include any person with a particular demographic feature (for example, a female above 75 years old who has college degree education level). A sample of 1000 individuals at least is much better than, say, 100 individuals.

Q387 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c3_5 **Response rate in a survey:** When participants are invited to surveys, not everyone accepts the invitation. The ratio between invitations and completed surveys refers to the **response rate**. If response rates are too low, it might sometimes lead to a bias in the representativeness of a sample. A response rate of 35% is much better than a response rate of 5%. Also, if response rates are small and different for different types of individuals, it might also create a bias in survey results. For example, participants more interested in politics can have higher response rate in a political survey and this may bias the results (people with greater political interest being overly-represented in that survey).

Q389 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c3_6 **Precision of results: margin of error** **Margin of error** refers to variability in results of a statistical finding. Survey results do not give exact findings, but provide estimates within a possibility range. This range is determined by the size of margin of error. For example, **+/- 3% margin of error means** that a particular finding is within 3 points below and 3 points above the exact number. A finding that states 54% (with +/-3% margin of error) of the public supports a policy means that the exact public support level is highly likely somewhere within the range of 51% (54-3) to 57% (54+3). **A smaller margin of error is a stronger methodological quality indicator** because the survey finding is more precise, the finding is within a narrower range. A margin of error of 3% is much better than a margin of error of 6%.

Q391 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c3_7
Summary

1. Surveys that have **representative (probability-based) samples** 2. Surveys that have **larger sample size** 3. Surveys that have **higher response rate** 4. Surveys that have **lower margin of error**

tend to have stronger methodological quality and are more scientific, accurate, reliable than those surveys which do not have these properties.

Q476 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

Q394 **Let's exercise! In this section we have 6 quiz questions, please respond by making your best attempt.**

Page Break

c3_q01 Which one is a methodologically stronger / more scientific survey?

- ○ A survey with a convenience sample (1)
- ○ A survey with probability-based random sampling (2)
- ○ Not sure (5)

Page Break

Q587 Correct answer: A probability-based random sampling survey has stronger methodological quality than a convenience sample survey.

Page Break

c3_q02 Which one is a methodologically stronger / more scientific survey?

- ○ A survey with 100 respondents (1)
- ○ A survey with 1000 respondents (2)
- ○ Not sure (3)

Page Break

Q590 Correct answer: A survey with 1000 respondents has stronger methodological quality than a survey with only 100 respondents.

Page Break

c3_q03 Which one is a methodologically stronger / more scientific survey?

- ○ A survey with a response rate of 3% (1)
- ○ A survey with a response rate of 35% (2)
- ○ Not sure (3)

Page Break

Q592 Correct answer: A survey with 35% response rate has stronger methodological quality than a survey with only 3% response rate.

Page Break

c3_q1 Assuming all other characteristics are the same, which of the following surveys' sample characteristics would provide the most accurate and reliable statistic for a country?

- ○ 1-) A convenience sample of individuals in a shopping mall (1)
- ○ 2-) A non-probability based sample of students at schools (4)
- ○ 3-) A non-probability based sample of people from each district (5)
- ○ 4-) A probability-based nationally representative sample of all individuals in the country (6)

Page Break

Q396
The correct answer is Option 4: "A probability-based nationally representative sample of all individuals in the country." This describes a representative sample for the population (country).

Q402 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c3_q2 Assuming all other characteristics are the same, which of the following surveys' sample characteristics would provide the best estimate of support levels in the country for a particular policy position?

- ○ 1-) When the sample size of the poll is 5,000, half of it coming from cities and the other half of it coming from rural areas (1)
- ○ 2-) When the sample size of the poll is 10,000, and is representative of 3 big cities or districts (4)
- ○ 3-) When the sample size of the poll is 8,000, and it is a convenience non-probability sample (5)
- ○ 4-) When the sample size of the poll is 5,000, and it is a probability-based nationally representative sample (6)

Page Break

Q398 The correct answer is Option 4: “When the sample size of the poll is 5,000, and it is a probability-based nationally representative sample” This describes a nationally representative sample. While Option 2 (10,000) has higher sample size than Option 4 (5,000), sample representativeness (probability based sample in Option 4) is a more important factor for methodological quality than sample size alone. Option 4 has also a large enough sample to have representative and reliable statistical findings.

Q404 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c3_q3 Assuming all other characteristics are the same, which of the following survey results would you be most confident represents a policy position that is supported by a majority of people (more than half - 50% - of the population)?

- ○ 1-) Policy position got 47% support, with a 2% margin of error (1)
- ○ 2-) Policy position got 51 % support, with a 2% margin of error (4)
- ○ 3-) Policy position got 54% support, with a 2% margin of error (5)
- ○ 4-) Both 2nd and 3rd options show that position is being supported by the majority (more than 50%) (6)

Page Break

Q400 The correct answer is Option 3, because it shows that 54% result is within range of 52% (54-2) and 56% (54+2), the range of 52 to 56 is clearly more than 50% threshold, showing the majority support. On the other hand, Option 2, 51%, range from 49% to 53%, so we are not confident if the survey in Option 2 represents a majority position for the policy position.

Q406 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

End of Block: c3_active literacy

Start of Block: c4_active literacy with inoculation warning

Q407 **Please read carefully and fully.**

c4_1
Methodological quality of surveys: While there are many surveys (polls) we encounter and read in media, surveys differ in their level of methodological quality (scientific strength). Some surveys are methodologically strong (**high quality**) while others are poor (**low quality**). High quality surveys provide more reliable and accurate statistical findings about the society while low quality surveys may be very misleading. There are a few key details to examine to evaluate the methodological quality of surveys. These details are ideally provided together with survey results when they are presented in the media. **We should pay attention to these details while reading survey reports.**

Q409 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c4_2 **Population vs. Sample:** **Population** is the collective of individuals a survey attempts to understand. Depending on the scope and aim of a survey, it could be an entire country or retired individuals, for example. **Sample** is the collective of individuals who participate in a survey and are drawn from the population under study. A survey tries to understand a population by studying a sample of it (which is a very small segment of a population). This is similar to tasting a spoon of soup while we are cooking a pot of soup. Soup in spoon would be the sample and the soup in the pot is the population.

Q411 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c4_3 **Representativeness of a sample:** **Representativeness** refers to how well **the sample** of a survey captures **the population** under study. Some samples are representative. Representative samples are collected with **probability-based scientific random selection methods**, which gives every participant equal chance of being included. Probability-based, randomly selected samples capture the diversity in a population successfully and usually avoid bias. On the other hand, **non-probability based samples, such as convenience samples** of participants who are included in a survey without random selection, are **NOT** representative. Some types of individuals (for example, those who happened to be in a shopping mall where survey was conducted) may be over-represented in a convenience sample, creating a bias. Going with the soup example, in order to taste the soup more accurately while cooking, we usually mix the soup and sample a representative sample of it with the spoon. If we do not mix the soup first and only sample from the top of the pot, our spoon will not take a representative sample of the soup.

Q413 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c4_4

Sample size of a survey: **Sample size** refers to the number of individuals who participated in a survey. Generally, greater number of participants (**larger sample size**) provides more statistical reliability and confidence in the statistical findings. For example, it is very hard to provide reliable results for a country based on only 100 participants in a survey, because such a low sample size may not include any person with a particular demographic feature (for example, a female above 75 years old who has college degree education level). A sample of 1000 individuals at least is much better than, say, 100 individuals.

Q415 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c4_5 **Response rate in a survey:** When participants are invited to surveys, not everyone accepts the invitation. The ratio between invitations and completed surveys refers to the **response rate**. If response rates are too low, it might sometimes lead to a bias in the representativeness of a sample. A response rate of 35% is much better than a response rate of 5%. Also, if response rates are small and different for different types of individuals, it might also create a bias in survey results. For example, participants more interested in politics can have higher response rate in a political survey and this may bias the results (people with greater political interest being overly-represented in that survey).

Q417 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c4_6 **Precision of results: margin of error** **Margin of error** refers to variability in results of a statistical finding. Survey results do not give exact findings, but provide estimates within a possibility range. This range is determined by the size of margin of error. For example, **+/- 3% margin of error means** that a particular finding is within 3 points below and 3 points above the exact number. A finding that states 54% (with +/-3% margin of error) of the public supports a policy means that the exact public support level is highly likely somewhere within the range of 51% (54-3) to 57% (54+3). **A smaller margin of error is a stronger methodological quality indicator** because the survey finding is more precise, the finding is within a narrower range. A margin of error of 3% is much better than a margin of error of 6%.

Q419 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c4_7
Summary

1. Surveys that have **representative (probability-based) samples** 2. Surveys that have **larger sample size** 3. Surveys that have **higher response rate** 4. Surveys that have **lower margin of error**

tend to have stronger methodological quality and are more scientific, accurate, reliable than those surveys which do not have these properties.

Q479 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

Q422 **Let's exercise! In this section we have 6 quiz questions, please respond by making your best attempt.**

Page Break

c4_q01 Which one is a methodologically stronger / more scientific survey?

- ○ A survey with a convenience sample (1)
- ○ A survey with probability-based random sampling (2)
- ○ Not sure (5)

Page Break

Q586 Correct answer: A probability-based random sampling survey has stronger methodological quality than a convenience sample survey.

Page Break

c4_q02 Which one is a methodologically stronger / more scientific survey?

- ○ A survey with 100 respondents (1)
- ○ A survey with 1000 respondents (2)
- ○ Not sure (3)

Page Break

Q594 Correct answer: A survey with 1000 respondents has stronger methodological quality than a survey with only 100 respondents.

Page Break

c4_q03 Which one is a methodologically stronger / more scientific survey?

- ○ A survey with a response rate of 3% (1)
- ○ A survey with a response rate of 35% (2)
- ○ Not sure (3)

Page Break

Q596 Correct answer: A survey with 35% response rate has stronger methodological quality than a survey with only 3% response rate.

Page Break

c4_q1 Assuming all other characteristics are the same, which of the following surveys' sample characteristics would provide the most accurate and reliable statistic for a country?

- 1-) A convenience sample of individuals in a shopping mall (1)
- 2-) A non-probability based sample of students at schools (4)
- 3-) A non-probability based sample of people from each district (5)
- 4-) A probability-based nationally representative sample of all individuals in the country (6)

Page Break

Q425
The correct answer is Option 4: "A probability-based nationally representative sample of all individuals in the country." This describes a representative sample for the population (country).

Q426 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c4_q2 Assuming all other characteristics are the same, which of the following surveys' sample characteristics would provide the best estimate of support levels in the country for a particular policy position?

- ○ 1-) When the sample size of the poll is 5,000, half of it coming from cities and the other half of it coming from rural areas (1)
- ○ 2-) When the sample size of the poll is 10,000, and is representative of 3 big cities or districts (4)
- ○ 3-) When the sample size of the poll is 8,000, and it is a convenience non-probability sample (5)
- ○ 4-) When the sample size of the poll is 5,000, and it is a probability-based nationally representative sample (6)

Page Break

Q429 The correct answer is Option 4: “When the sample size of the poll is 5,000, and it is a probability-based nationally representative sample” This describes a nationally representative sample. While 2 (10,000) has higher sample size than Option 4 (5,000), sample representativeness (probability based sample in Option 4) is a more important factor for methodological quality than sample size alone. Option 4 has also a large enough sample to have representative and reliable statistical findings.

Q430 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c4_q3 Assuming all other characteristics are the same, which of the following survey results would you be most confident represents a policy position that is supported by a majority of people (more than half - 50% - of the population)?

- ○ 1-) Policy position got 47% support, with a 2% margin of error (1)
- ○ 2-) Policy position got 51 % support, with a 2% margin of error (4)
- ○ 3-) Policy position got 54% support, with a 2% margin of error (5)
- ○ 4-) Both 2nd and 3rd options show that position is being supported by the majority (more than 50%) (6)

Page Break

Q433 The correct answer is Option 3, because it shows that 54% result is within range of 52% (54-2) and 56% (54+2), the range of 52 to 56 is clearly more than 50% threshold, showing the majority support. On the other hand, Option 2, 51%, range from 49% to 53%, so we are not confident if the survey in Option 2 represents a majority position for the policy position.

Q434 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c4_forewarn1 **IMPORTANT: Misuse of Surveys as Misinformation ! Surveys/polls may also be used as misinformation by some people and organizations.**

Q436 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c4_forewarn2 **IMPORTANT: Misuse of Surveys as Misinformation !** > Sometimes survey **results may be mis-contextualized** in order to use them as evidence in support of an inaccurate claim.

Q604 Timing
First Click (1)
Last Click (2)
Page Submit (3)
Click Count (4)

Page Break

c4_forewarn3 **IMPORTANT: Misuse of Surveys as Misinformation !** > Surveys with **poor methodological quality and important scientific limitations** may be presented as evidence for accurate public opinion.

Q603 Timing
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c4_forewarn4 **IMPORTANT: Misuse of Surveys as Misinformation !** > Some digital platforms have a survey/poll design feature, such as **Twitter Polls and Instagram Polls. These are not scientific and have extremely low methodological quality.** They are considered **'straw polls.'** These surveys may be engaging and fun, but they are not scientific.

Q602 Timing
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c4_forewarn5 **IMPORTANT: Misuse of Surveys as Misinformation ! For these reasons, we should be critical and careful while reading survey findings. We should check the methodological details and other relevant information to ensure the credibility and quality of evidence presented to protect ourselves from misinformation that makes use of surveys.**

Q601 Timing
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End of Block: c4_active literacy with inoculation warning

Start of Block: manipcheck1

b How worried are you about potential misuse of and misinformation in surveys / polls?

- Not at all worried (1)
- A little worried (2)
- Somewhat worried (3)
- Very worried (4)
- Extremely worried (5)

c How familiar are you Twitter Polls or Instagram Polls?

- Not at all familiar (1)
- A little familiar (2)
- Somewhat familiar (3)
- Very familiar (4)
- Extremely familiar (5)

End of Block: manipcheck1

Start of Block: manipcheck2

credible How credible do you find survey/poll findings in the media in general?

- Not at all credible (1)
- A little credible (2)
- Somewhat credible (3)
- Very credible (4)
- Extremely credible (5)

accurate How acccurate do you find survey/poll findings in the media in general?

- Not at all accurate (1)
- A little accurate (2)
- Somewhat accurate (3)
- Very accurate (4)
- Extremely engaging (5)

informative How informative do you find survey/poll findings in the media in general?

- Not at all informative (1)
- A little informative (2)
- Somewhat informative (3)
- Very informative (4)
- Extremely informative (5)

Q572 Timing
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concern1 How risky is the possibility that surveys/polls can manipulate and mislead people?

- Not at all risky (1)
- A little risky (2)
- Somewhat risky (3)
- Very risky (4)
- Extremely risky (5)

concern2 How worried are you that surveys/polls can manipulate and mislead people?

- Not at all worried (1)
- A little worried (2)
- Somewhat worried (3)
- Very worried (4)
- Extremely worried (5)

concern3 How concerned are you that surveys/polls can manipulate and mislead people?

- Not at all concerned (1)
- A little concerned (2)
- Somewhat concerned (3)
- Very concerned (4)
- Extremely concerned (5)

Q573 Timing
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efficacy1 How confident are you in understanding survey/poll findings in the media?

- Not at all confident (1)
- A little confident (2)
- Somewhat confident (3)
- Very confident (4)
- Extremely confident (5)

efficacy2 How much informed are you in understanding survey/poll findings in the media?

- Not at all informed (1)
- A little informed (2)
- Somewhat informed (3)
- Very informed (4)
- Extremely informed (5)

Q574 Timing
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mc_for_control How informed do you feel about the game of baseball?

- ○ Not at all informed (1)
- ○ A little informed (2)
- ○ Somewhat informed (3)
- ○ Very informed (4)
- ○ Extremely informed (5)

End of Block: manipcheck2

Start of Block: DemogsControls

X→

vaccination Did you get a COVID-19 vaccine?

- ○ No (1)
- ○ Yes, 1 dose (2)
- ○ Yes, 2 doses (3)
- ○ Yes, 3 doses (4)
- ○ Yes, 4 doses or more (5)

sideeffects Did you yourself experience any side effects from any of the COVID-19 vaccines you took?

- ○ No side effects at all (1)
- ○ Very minor side effects (2)
- ○ Minor side effects (3)
- ○ Moderate side effects (4)
- ○ Major side effects (needed to go to hospital) (5)

Page Break

experienceAI Have you ever used artificial intelligence (AI) chatbots such as ChatGPT?

- ○ Never (1)
- ○ Only once (2)
- ○ A few times (3)
- ○ Quite a few times (4)
- ○ Using it regularly (5)

Page Break

Ideology Generally speaking, would you describe your political views as:

- ○ Very conservative (1)
- ○ Somewhat conservative (2)
- ○ Moderate; middle of the road (3)
- ○ Somewhat liberal (4)
- ○ Very liberal (5)
- ○ Do not want to respond (6)

End of Block: DemogsControls

Start of Block: Debriefing

debrief1 **PLEASE READ.** Thank you for participating in Part 1 (Survey 1) of this study. A full debrief will be provided after completion of Part 2 (Survey 2) of this study which will happen about 7 to 10 days later. Some research designs require that the full extent of the study not be explained prior to participation in Survey 2. Although we have described the general nature of the tasks that you will be asked to perform, the full intent of the study will not be explained to you until after the completion of the study, at the end of Survey 2. At that time, we will provide you with a full debriefing which will include an explanation of the hypothesis that was tested and other relevant background information pertaining to the study. You will also be given an opportunity to ask any questions you have about the hypothesis and the procedures used in the study." Y**ou will receive an invitation to a second and shorter Part 2 survey if you complete this part.** If you have any further queries about the study, please contact the Principal Investigator and they will be more than happy to address any other queries that you may have about the study. If you decide to withdraw your data after going through the full debriefing document, you can do it. You will still be reimbursed if you decide to withdraw after the full debrief (upon completion of Part 2 of this study) Please contact the Principal Investigator, Dr Ozan Kuru, (via email okuru@nus.edu.sg or telephone +65 66016593) for all research-related matters and in the event of research-related injuries or inquiries. If you do not plan to join the Survey 2 or end up deciding not joining later on, you can contact the researcher in case you want to learn more about the full purpose and scope of this study. Withdrawals are possible both during submission of this page as well as afterwards. You may keep a record of this debriefing for your own records by taking a screenshot, a picture of the screen by another device, or copy-pasting it in a document. **Please indicate below if you want to submit your answers and finalize the survey. If, after reading this debriefing, you want to withdraw**

your responses from this study, you have the option to do so (click below) before closing this screen.

- ○ **CLICK HERE TO SUBMIT YOUR RESPONSES AND FINALIZE THE SURVEY** (1)
- ○ WITHDRAW MY RESPONSES (2)

End of Block: Debriefing