

The Power of Fewer Options: Choice Overload in UBC's Climate Action Plan

Prepared by: Diana Bui, Mira Sehgal, Nayah Recuenco, Por Charoenporn, Sama Naik, Shreya Sanjeev

CAPTivate

Prepared for: UBC Campus and Community Planning

Department of Psychology, University of British Columbia

Course: PSYC 421 2024W2: Environmental Psychology

Instructor: Dr. Jiaying Zhao

April 8, 2025

Disclaimer: UBC SEEDS Sustainability Program provides students with the opportunity to share the findings of their studies, as well as their opinions, conclusions and recommendations with the UBC community. The reader should bear in mind that this is a student research project and is not an official document of UBC. Furthermore, readers should bear in mind that these reports may not reflect the current status of activities at UBC. We urge you to contact the research persons mentioned in a report or the SEEDS Sustainability Program representative about the current status of the subject matter of a report.



Executive Summary

This study examined the impact of choice overload on student engagement with pro-environmental behaviours outlined in UBC's Climate Action Plan 2030 (CAP 2030). The research question asks: How does the number of available climate actions influence UBC students' intention to take climate-friendly actions as listed in CAP 2030? Using a between-subjects experimental design, 228 participants who are primarily UBC students were recruited and randomly assigned to either a limited-choice condition (four climate actions) or an extensive-choice condition (ten actions), all derived from CAP 2030. Participants selected actions they were most willing to do, and their climate change attitudes were assessed using a Climate-Belief Index. Results indicated that participants in the limited-choice condition selected a significantly greater proportion of actions than those in the extensive-choice condition with the difference being statistically significant. A small-to-moderate positive correlation was observed between stronger climate change beliefs and action selection in each condition ($r = .42$, $r = .35$). These findings support the hypothesis of choice overload, suggesting that too many options may decrease engagement from students. For initiatives like CAP 2030, focusing on a small set of high-impact behaviours could increase student participation and overall effectiveness.

Contents

Executive Summary	3
Introduction.....	5
Research Question and Hypothesis.....	6
Methods	6
Results.....	7
Discussion.....	8
Recommendations for client	9
References.....	11
Appendices.....	12
Appendix A.....	12
Appendix B	14
Appendix C	15
Appendix D.....	16
Appendix E	17
Appendix F.....	18
Appendix G.....	19
Appendix H.....	24

Introduction

Institutions across the globe are increasingly encouraging individuals to engage in climate change mitigation. UBC's Climate Action Plan 2030 (CAP 2030), for instance, details many strategies that can be adopted by students to minimize their footprint. Providing too many options, though, can inadvertently discourage them. *Choice overload*—described as the situation where a wide range of options results in decision paralysis, decreased satisfaction, or lower motivation—has been extensively documented in psychological and consumer behaviour literature (Iyengar & Lepper, 2000; Chernev et al., 2015).

Iyengar and Lepper (2000) also observed that participants were more likely to take action and provide self-reported satisfaction when given six choices rather than 24, despite being initially drawn to the greater range. This is commonly known as the *paradox of choice* and indicates that increased options may not always result in improved outcomes. Drawing on this, Chernev et al. (2015) carried out a meta-analytic study that established four moderators of overload: decision-task complexity, choice set complexity, preference uncertainty, and decision goal. Its conclusions support that overload is likely to arise in environments where people lack prior knowledge or specialized preferences—conditions that frequently exist in university students when approaching climate actions frameworks. While the literature is not uniform, Scheibehenne et al. (2010), in a different meta-analytic study, found a near-zero average effect size, implying that choice overload effects are varied and context-dependent and are influenced by task-relevant moderators. Far from invalidating the phenomenon, this confirms that it demands examination in applied, domain-specific contexts—e.g., in climate policies of institutions. Recent research by Andrews et al. (2022) addresses this directly in the environmental sphere. They conducted a study that introduced the phenomenon of mitigation overload, which showed that when participants were given 20 pro-environmental behaviours compared to fewer, the participants also felt less efficacious and carried out fewer actions a week later. According to the authors, people might view the very lengthy listing as an implicit instruction to do it all, leading to reduced self-efficacy and disengagement. This is evidenced in the study of Townsend and Kahn (2013), which revealed that extensive visual repertoires—while attractive in the beginning—eventually lead to perceived complexity and decreased follow-through when the preferences are ambiguous. Galesic and Bosnjak (2009) also demonstrated that longer questionnaires reduced involvement and data quality, indicating greater cognitive disengagement in the face of too many options or tasks.

Despite strong evidence, a gap remains in understanding how choice overload affects engagement with institutional climate plans, especially among students. While initiatives like CAP 2030 present a wide array of pro-climate behaviours, it is unclear whether this abundance helps or hinders student participation. This study addresses that gap by experimentally testing whether UBC students are more likely to endorse CAP 2030 when presented with a limited versus extensive list of climate actions. In doing so, it contributes to both environmental psychology and policy design by examining how simplified choice architecture may enhance climate engagement.

Research Question and Hypothesis

The research question our study sought to answer was – How does the number of available climate actions influence UBC students' intention to take climate-friendly actions as listed in CAP 2030? Our hypothesis was that UBC students will choose to take more climate actions proportionally out of a limited set of 4 actions than an extensive set of 10 actions.

Methods

Participants

A power analysis conducted prior to data collection indicated that a minimum of 394 participants per condition (total $N = 788$) would be required to detect a small-to-moderate effect size (Cohen's $d \approx .30$) with 80% power at an alpha level of .05. Due to time and logistical constraints, a total of 228 participants were recruited for the study. Of the total sample, 117 participants were assigned to the limited choice condition and 111 to the excessive choice condition. Approximately 90% of participants identified as UBC students, while the remaining 10% included faculty, staff, or individuals unaffiliated with the university (see Appendix C). The average age of participants was approximately 21 years. In terms of gender identity, over half of the participants identified as women, 35% as men, and 7% as non-binary (see Appendix C).

Conditions

This study used a between-subjects experimental design, meaning that each participant was exposed to only one of two choice conditions. This design helped reduce potential biases, such as order or carryover effects, that could have influenced responses if participants were shown both conditions.

All climate actions were drawn from CAP 2030 and presented as realistic, high-impact behaviours that participants could engage in, on, or around campus. The independent variable in this study was the length of the climate action list presented to participants, a short, limited set of four options or a long, extensive list of ten (See Appendix B). This variable was operationalized as the number of action options visible in a multiple-selection checklist format embedded in the survey.

Measures

The participants' willingness to take climate-related action was measured by asking participants to select from a list of climate actions they were willing to take at UBC. The number of available options depended on the condition: participants in the limited-choice condition were shown four actions, while those in the extensive-choice condition were shown ten (see Appendix B). To compare conditions fairly, a percent action score was calculated.

The climate action items were created specifically for this study and were not drawn from a validated behavioural scale. Instead, they were adapted from CAP 2030 and selected based on their clarity, relevance, and practicality for students. Although the items were not formally validated in previous research, they were appropriate for this context due to their alignment with institutional sustainability goals and their accessibility for the student population. The checklist format made it easy for participants to engage with the task and reflect on their willingness to take meaningful climate-related actions.

To provide contextual insight into participants' environmental worldviews, a Climate-Belief Index, with three Likert-scale items, was included to assess general beliefs about climate change (see Appendix D). These items were adapted from Fairbrother et al. (2019) and reflect three key dimensions of climate belief: whether the climate is changing, whether it is caused primarily by human activity, and whether its impacts will be harmful. These dimensions align with those used in cross-national survey research examining public opinion on climate change (Fairbrother et al., 2019). Each item was analyzed descriptively to characterize the sample's attitudes but was not included in the primary hypothesis testing.

Procedure

This study was a between-subjects experimental design that collected data via an online Qualtrics survey. Data collection was conducted over a couple weeks during the Winter 2025 academic term. 228 valid responses were obtained through recruitment strategies, including Instagram, campus-wide poster campaigns (see Appendix F), word-of-mouth through peers, interactions with students on campus and posts on UBC-related Reddit forums. Participants were presented with the debrief form after completing the survey (see Appendix E). One significant challenge encountered during data collection was the non-completion of surveys by participants. Of 291 participants who began the study, 63 did not complete it.

Results

All statistical analyses, including descriptive statistics (mean and standard deviation), Levene's test for homogeneity of variance, the Mann-Whitney U test, effect size calculations, and Pearson's correlation were conducted using Jamovi. Geometric means on the climate-belief index were calculated using Excel. These analyses were used to assess whether there was a significant difference between the two between-subjects conditions: limited-choice and extensive-choice.

Our significance level was set at $\alpha = .05$. The final sample size was $N = 228$, after excluding 63 responses due to incomplete survey data. There were 111 participants in the limited-choice condition ($\bar{x} = 68.0$, $s = 22.9$) and 117 in the extensive-choice condition ($\bar{x} = 49.3$, $s = 25.2$). Levene's test indicated a violation of the assumption of equal variances ($F = 1.94$, $df = 1$, $df2 = 226$, $p = .166$), and visual inspection suggested the data were non-normally distributed. Therefore, we used the Mann-Whitney U test, a non-parametric alternative, to test for statistical significance. The test revealed a statistically significant difference between the two groups ($p < .001$, $\alpha = .05$). The rank biserial effect size was $r = .394$, indicating a moderate positive effect. This suggests that participants were significantly more likely to make a choice in the limited-

choice condition than in the extensive-choice condition. These findings support our hypothesis on the effect choice overload on indulging in climate action behaviours.

The most-frequently chosen option in both conditions was “Composting food waste instead of throwing it in the garbage”. On the other hand, the least-frequently chosen option in the limited-choice condition was “Eating more climate-friendly food (e.g., plant-based)”, and “Taking shorter showers to reduce water and energy use” in the extensive-choice condition. For all the options in the limited-choice condition, the number of people willing to take the same action in the extensive-choice condition decreased (see graph in Appendix G for exact numbers).

As for the Climate-Belief index data, we calculated the geometric mean of each participant’s response on the belief scale. The most skeptical response was coded as 1. Observed values on the (adjusted) scale ranged from 2.0 to 6.32. The average participant response on the Climate-Belief index was 4.89. Correlation between average belief score and the number of items chosen on the questionnaire was $r = .42$ ($df = 109$) for the limited-choice condition, and $r = .35$ ($df = 115$) for the extensive-choice condition, indicating a small-to-moderate positive correlation in both.

Out of the 63 participants who did not complete the survey, 47 exited it before being assigned a condition. Of the 16 that did get assigned, 9 belonged to the limited-choice condition and 7 belonged to the extensive-choice condition. (See Appendix G for detailed tables, graphs and plots.)

Discussion

The results of this study support the hypothesis that participants would select a higher proportion of climate actions when presented with fewer available options. Participants in the limited-choice condition chose 68% of the actions shown, compared to 49.3% in the extensive-choice condition. This difference was statistically significant ($p < .001$) with a small-to-moderate effect size ($r = .394$), suggesting that the number of options influenced willingness to act.

Participants were generally more willing to choose low-effort behaviours, like composting, than actions involving lifestyle changes, such as shorter showers or eating more plant-based meals. This suggests perceived effort plays a role in willingness to act. The study also found a moderate positive correlation ($r = .42$, $r = .35$) between participants’ climate stance and the number of actions chosen, suggesting those more concerned about climate change were also more willing to act. However, most participants held strong climate beliefs (geometric mean score = 4.89), which limited variability.

As stated prior, these findings are consistent with the concept of choice overload, which suggests that too many available options can overwhelm individuals and reduce motivation to act (Iyengar & Lepper, 2000; Scheibehenne et al., 2010). Interestingly, when identical actions were presented in both conditions, participants were less likely to choose them in the extensive-choice condition, indicating that the reduced engagement was influenced by the larger number of options (Iyengar & Lepper, 2000). Participants in the limited-choice condition selected a higher percentage of actions, the total number of actions selected was similar across conditions.

This indicates that choice overload affects proportions more than absolute behavior (Iyengar & Lepper, 2000; Scheibehenne et al., 2010). This finding may possibly contribute to limited behavioral engagement of UBC's CAP 2030 goals despite widespread concern about climate change.

Despite a clear pattern in our findings, there are limitations that must be acknowledged. The initial concern lies in our measure of engagement relied on self-reported questionnaires in a hypothetical survey. While useful for gauging interest, it does not capture whether students would follow through on these actions in practice. There is a possibility of social desirability bias, where participants overstate their willingness to act due to the low cost of indicating interest in a survey. In addition, we observed a notable dropout rate which may indicate reduced motivation or fatigue, especially in the extensive list condition. If students found the list overwhelming or tedious, they may have exited before completing the survey, suggesting that the data could underrepresent those most affected by choice overload.

These limitations point to potential considerations if the study were to be re-run. Reducing survey length, offering follow-up incentives, or integrating action choices into real-world contexts could improve retention and external validity. Additionally, providing participants with contextual cues—such as grouping actions by theme or including brief explanations—may reduce decision fatigue without compromising engagement.

Future research should examine whether students' selected actions translate into sustained behaviour change. Longitudinal tracking—through follow-up surveys or behavioural data, such as residence compost use or food purchases—could assess the intention-behaviour gap more directly. Studies should also explore whether reframing lower-engagement actions (e.g., shorter showers or diet changes) as personally or socially rewarding increases behavioural change. Testing variations in framing, such as highlighting environmental vs. personal benefits, or offering immediate feedback on impact, may improve student motivation.

Our results suggest that limiting options can increase student engagement with climate action. However, applying this to broader sustainability goals requires a balance—simplifying choices should not come at the cost of comprehensiveness. While a curated shortlist may boost initial participation, long-term engagement may depend on gradually expanding action menus with ongoing support.

Recommendations for client

Our findings suggest that the more choices students have, the less action they take. Future policy and initiatives related to UBC's CAP 2030 should focus on pushing a few high-impact climate actions—ideally between four to six actions per campaign. We were aware that although this is consistent with principles of behavioural decision theory and the overloading of choice, it seems intuitively counterproductive towards the overall goal of encouraging as much climate action as possible. We suggest that it is not only the number of actions listed that could be reconsidered, but also how they are presented. For example, as an alternative option presentation, instead of presenting a single long list of actions in UBC's CAP 2030, it may make sense to present a series of multiple short lists (i.e., multiple sets of 3-4 actions each), to facilitate low

choice overload but more actions in total by inviting participants to engage with a series of short lists of components or actions. These actions should include signage near areas where the policy can be visibly observed—explaining the goal of the action to increase student awareness of the select climate actions, and encouraging pro-climate behaviour. Alongside signage, another way to further engage UBC students is to implement commitment tools like sticker pledges or opt-in forms. For future data collection we recommend staying away from surveys as it not only is difficult to get participants, but it also has a high dropout rate.

References

- Andrews, T. M., Kline, R., Krupnikov, Y., & Ryan, J. B. (2022). Too many ways to help: How to promote climate change mitigation behaviours. *Journal of Environmental Psychology*, 81, 101806. <https://doi.org/10.1016/j.jenvp.2022.101806>
- Chernev, A., Böckenholt, U., & Goodman, J. (2014). Choice overload: A conceptual review and meta-analysis. *Journal of Consumer Psychology*, 25(2), 333–358. <https://doi.org/10.1016/j.jcps.2014.08.002>
- Fairbrother, M., Johansson Sevä, I., & Kulin, J. (2019). Political Trust and the relationship between climate change beliefs and support for fossil fuel taxes: Evidence from a survey of 23 European countries. *Global Environmental Change*, 59, 102003. <https://doi.org/10.1016/j.gloenvcha.2019.102003>
- Galesic, M., & Bosnjak, M. (2009). Effects of Questionnaire Length on Participation and Indicators of Response Quality in a Web Survey. *The Public Opinion Quarterly*, 73(2), 349–360. <http://www.jstor.org/stable/25548084>
- Iyengar, S. S., & Lepper, M. R. (2000). When choice is demotivating: Can one desire too much of a good thing? *Journal of Personality and Social Psychology*, 79(6), 995–1006. <https://doi.org/10.1037/0022-3514.79.6.995>
- Scheibehenne, B., Greifeneder, R., & Todd, P. M. (2010). Can there ever be too many options? A meta-analytic review of choice overload. *Journal of Consumer Research*, 37(3), 409–425. <https://doi.org/10.1086/651235>
- Townsend, C., & Kahn, B. E. (2013). The “Visual Preference Heuristic”: The Influence of Visual versus Verbal Depiction on Assortment Processing, Perceived Variety, and Choice Overload. *Journal of Consumer Research*, 40(5), 993–1015. <https://doi.org/10.1086/673521>

Appendices

Appendix A

Informed Consent



UNIVERSITY OF BRITISH COLUMBIA

Department of Psychology
University of British Columbia
Vancouver, BC, V6T 1Z4
Phone: 604.822.2755
Fax: 604.822.6923

Consent Form

Class Research Projects in PSYC 421 - Environmental Psychology

Principal Investigator: Dr. Jiaying Zhao
Course Instructor
Department of Psychology
Institute for Resources, Environment and Sustainability
Email: jiayingz@psych.ubc.ca

Introduction and Purpose

Students in the PSYC 421 – Environment Psychology class are required to complete a research project on the UBC campus as part of their course credit. In this class, students are required to write up a research proposal, conduct a research project, collect and analyze data, present their findings in class, and submit a final report. Their final reports will be published on the SEEDS online library (<https://sustain.ubc.ca/teaching-applied-learning/seeds-sustainability-program>). Their projects include online or in-person surveys and experiments on a variety of sustainability topics, such as waste sorting on campus, student health and wellbeing, food consumption and diet, transportation, biodiversity perception, and exercise habits. The goal of the project is to train students to learn research techniques, how to work in teams and work with UBC clients selected by the UBC SEEDS (Social Ecological Economic Development Studies) program.

Study Procedures

If you agree to participate, the study will take 5-10 minutes of your time. You will answer a few questions in the study. The data will be strictly anonymous. Your participation is entirely voluntary, and you can withdraw at any point without any penalty. Your data in the study will be recorded (e.g., any answer you give) for data analysis purposes. If you are not sure about any instructions, please do not hesitate to ask. Your data will only be used for student projects in the class. There are no risks associated with participating in this experiment.

Confidentiality

Your identity will be kept strictly confidential. All documents will be identified only by code numbers. No personally identifying information will be collected. Data that will be kept on a computer hard disk will also be identified only by code numbers and will be encrypted and password protected so that only the principal investigator, also the course instructor, Dr. Jiaying Zhao, and the teaching assistants will have access to it. Following the completion of the study, the data will be transferred to an encrypted and password protected hard drive and stored in a locked filing cabinet. Please note that the results of this study will be used to write a report which is published on the SEEDS library.

Remuneration

There is no remuneration for your participation.

UNIVERSITY OF BRITISH COLUMBIA



Department of Psychology
 University of British Columbia
 Vancouver, BC, V6T 1Z4
 Phone: 604.822.2755
 Fax: 604.822.6923

Contact for information about the study

This study is being conducted by Dr. Jiaying Zhao, the principal investigator. Please contact her if you have any questions about this study. Dr. Zhao may be reached at (604) 827-2203 or jiayingz@psych.ubc.ca.

Contact for concerns about the rights of research subjects

If you have any concerns or complaints about your rights as a research participant and/or your experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Ethics at 604-822-8598 or if long distance e-mail RSIL@ors.ubc.ca or call toll free 1-877-822-8598.

Consent: Your participation in this study is entirely voluntary and you may refuse to participate or withdraw from the study at any time. You also may postpone your decision to participate for 24 hours. You have the right to choose to not answer some or any of the questions. By clicking the "continue" button, you are indicating your consent to participate; hence, your signature is not required. The researchers encourage you to keep this information sheet for your records. Please feel free to ask the investigators any additional questions that you have about the study.

Ethics ID: H17-02929

By clicking 'Yes,' you confirm that you have read and understood the consent form and voluntarily agree to participate in this survey.

- ☐ Yes

Appendix B

List of pro-climate choices

Each participant was asked a question on the climate actions they'd take at UBC. They were randomly assigned to either the limited choice or the extended choice condition through qualtrics.

Which of the following actions are you willing to take at UBC? (select all that apply)

- Eat more climate-friendly food (e.g., plant-based)
- Compost food waste instead of throwing it in the garbage
- Purchase second-hand or sustainably made clothing instead of buying new
- Carpool to classes or events on campus instead of driving alone

Which of the following actions are you willing to take at UBC? (select all that apply)

- Eat more climate-friendly food (e.g., plant-based)
- Compost food waste instead of throwing it in the garbage
- Purchase second-hand or sustainably made clothing instead of buying new
- Carpool to classes or events on campus instead of driving alone
- Take shorter showers to reduce water and energy use
- Reduce single-use plastic items (e.g., bring a reusable water bottle, cutlery, or coffee cup)
- Unplug electronic devices when not in use to conserve energy
- Bike or walk to campus whenever possible
- Opt for virtual meetings instead traveling (e.g., flying or driving)
- Choose locally sourced or seasonal food when available

Appendix C

Demographic Questions

1. Are you affiliated with UBC?
 - ☐ Yes, I'm a student.
 - ☐ Yes, I'm a staff or faculty member.
 - ☐ No, I'm not affiliated with UBC
2. What is your age? (in years) [text entry response]
3. What is your gender identity?
 - ☐ Woman
 - ☐ Man
 - ☐ Non-binary person
 - ☐ Prefer not to answer
4. Do you have lived experience as a trans person (meaning your gender identity does not align with your gender assigned at birth)?
 - ☐ Yes
 - ☐ No
 - ☐ Prefer not to answer

Appendix E

Debriefing Form

Thank You for Participating!

Your input is valuable in shaping sustainability efforts at UBC. If you'd like to learn more about UBC's Climate Action Plan 2030 (CAP 2030) and how you can contribute, check out these resources:

- UBC Climate Action Plan: <https://planning.ubc.ca/cap2030>
- UBC Sustainable Transportation
Initiatives: <https://planning.ubc.ca/transportation/transportation-planning>
- UBC Zero Waste Action Plan: <https://planning.ubc.ca/zero-waste-action-plan>
- UBC SEEDS Sustainability Program: <https://planning.ubc.ca/sustainability/seeds-sustainability-program>

If you have any questions or want to get involved, feel free to reach out to:

<https://planning.ubc.ca/about-us/contact-us>. Together, we can create a more sustainable future!

Appendix F

Experimental Material

The recruitment poster was displayed across multiple high-traffic locations on the UBC Vancouver campus, including the AMS Nest, Life Building, Buchanan Complex, Student Recreation Centre (SRC), and the Allard Law Library.

Figure B1. Recruitment poster used in study



Appendix G

Charts and Graphs

Figure G1. Percent options chosen in limited choice and extensive choice conditions

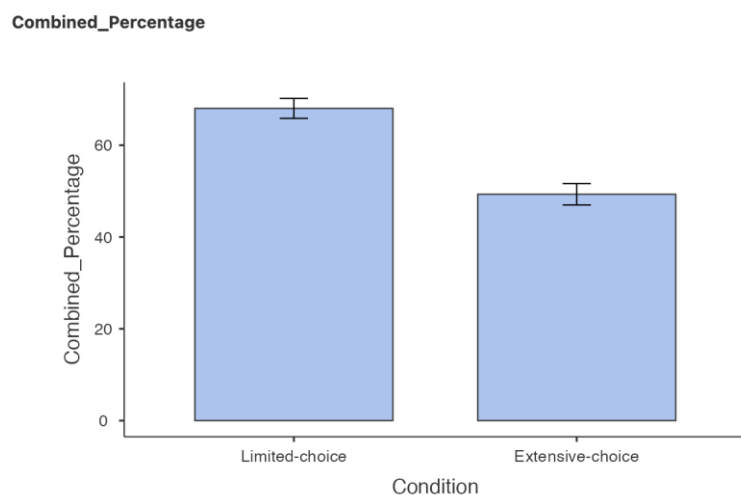


Table G1. Descriptive statistics for each condition (long = extensive choice, short = limited-choice)

Descriptives

	Percent responses - Long	Percent responses - Short
N	117	111
Missing	111	117
Mean	49.3	68.0
Median	50	75
Standard deviation	25.2	22.9
Minimum	10	25
Maximum	100	100

Figure G2. Visual depiction of non-normality in limited choice condition

Percent responses - Short

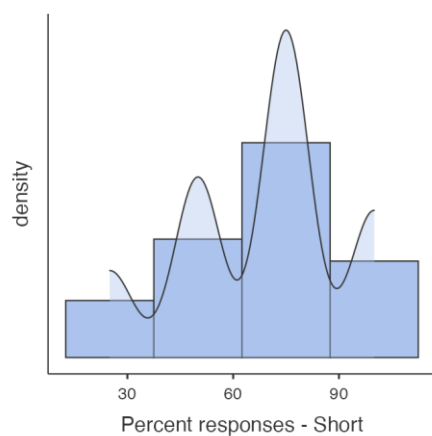


Figure G3. Visual depiction of non-normality in extensive choice condition

Percent responses - Long

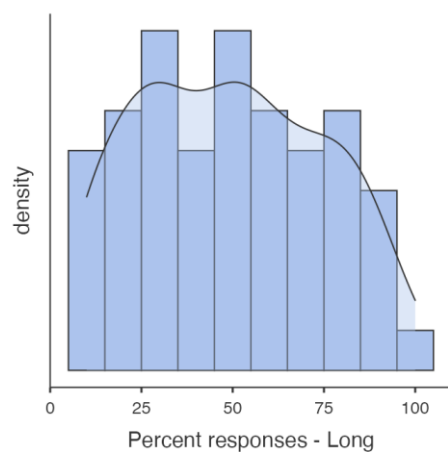


Table G2. Levene's test to inspect for homogeneity of variances in the two conditions

Homogeneity of Variances Test (Levene's)

	F	df	df2	p
Combined_Percentage	1.94	1	226	0.166

Note. A low p-value suggests a violation of the assumption of equal variances

Table G3. Mann-Whitney U test to check for statistical significance, Rank biserial correlation to check effect-size

Independent Samples T-Test		Statistic	p	Effect Size	
Combined_Percentage	Mann-Whitney U	3933	<.001	Rank biserial correlation	0.394

Note. $H_a: \mu_1 \neq \mu_2$

Figure G4. Scatter plot of correlations between geometric means of climate-belief scores and % options chosen

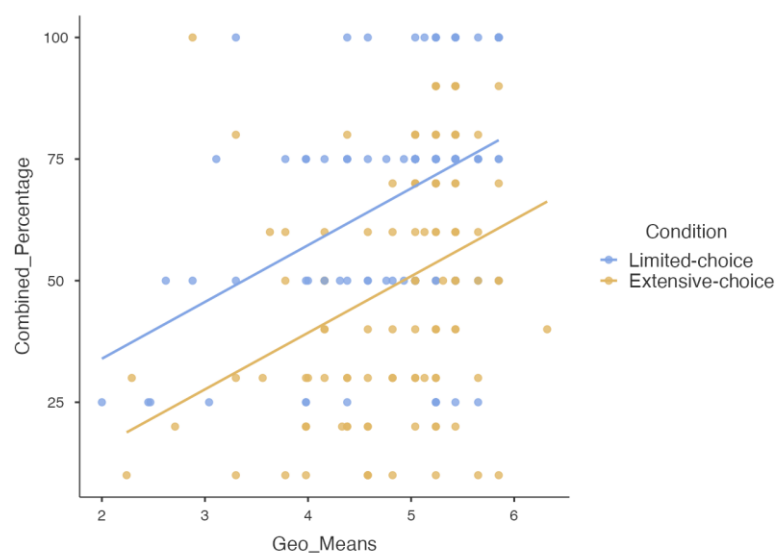


Table G4. Correlation between geometric means of climate-belief scores and % options chosen in the limited-choice condition

Correlation Matrix		Geo_Mean	Percent responses - Short
Geo_Mean	Pearson's r	—	
	df	—	
	p-value	—	
Percent responses - Short	Pearson's r	0.418	—
	df	109	—
	p-value	<.001	—

Table G5. Correlation between geometric means of climate-belief scores and % options chosen in the extensive-choice condition

Correlation Matrix		Geo_Mean	Percent responses - Long
Geo_Mean	Pearson's r	—	
	df	—	
	p-value	—	
Percent responses - Long	Pearson's r	0.351	—
	df	115	—
	p-value	<.001	—

Figure G5. Number of responses for each action in the limited-choice condition

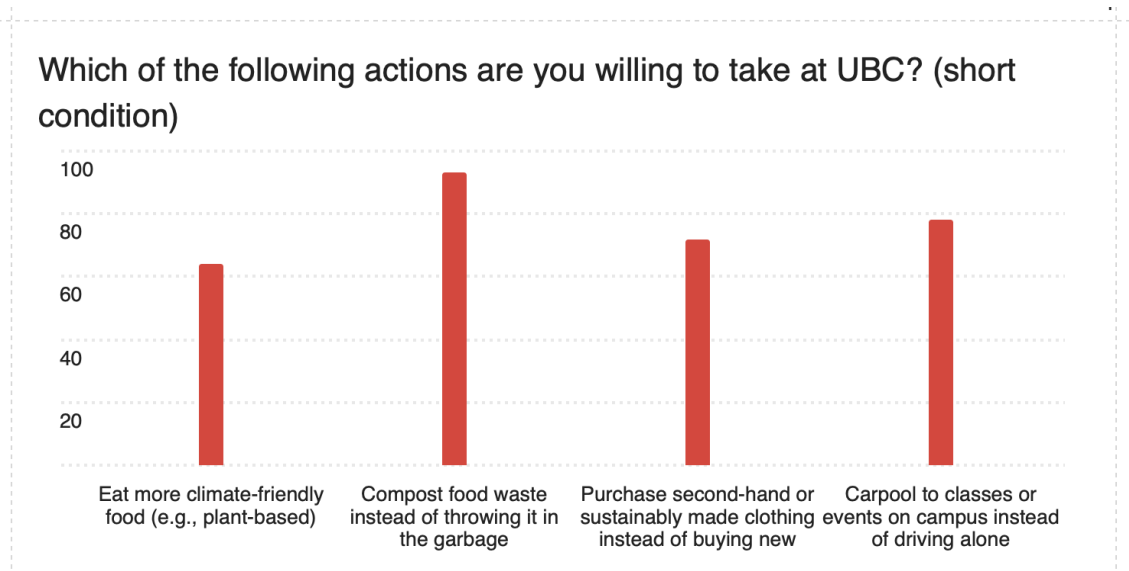
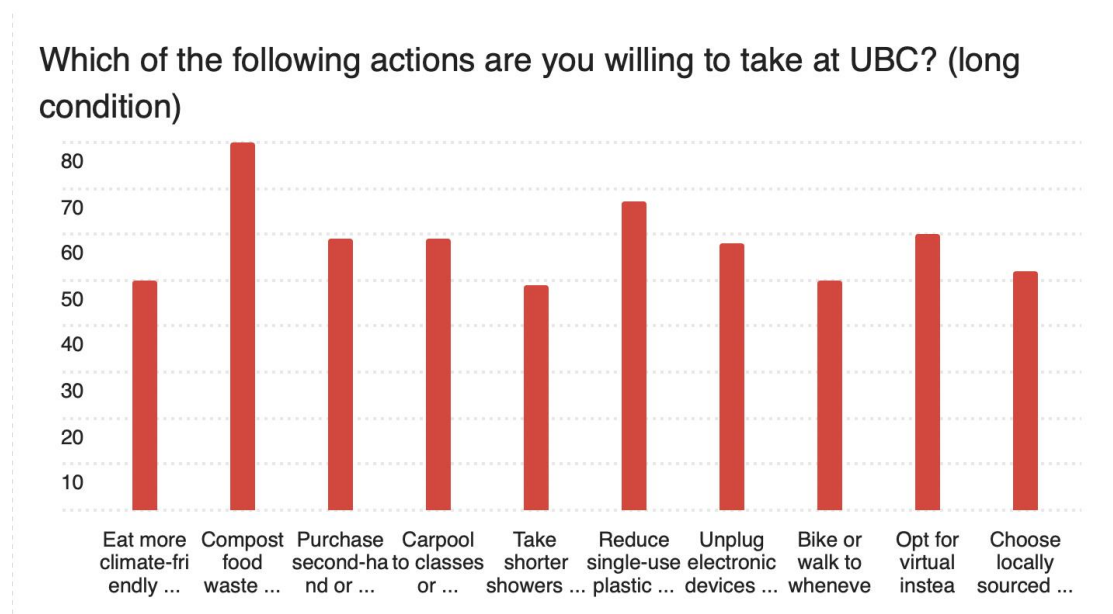


Figure G6. Number of responses for each action in the extensive-choice condition



Appendix H

Contributions

Research Project Proposal

The TCPS 2 was completed and names were listed by all group members individually, while the group name and project title were created collaboratively across members. The appendix was completed by Sama Naik and Nayah Recuenco. For the background literature, each group member found 1 article for Diana Bui to use in assembling this section. The research question and hypothesis were developed collaboratively through group discussion. The participant sample and sample size were written primarily by Sama Naik, with the exception of the power analysis which was done by Dr. Jiaying Zhao. Shreya Sanjeev wrote the conditions section and Por Charoenporn wrote the measures section. Lastly, Mira wrote the statistical analyses.

Data Collection

All group members contributed to distributing posters created by Nayah which were displayed across multiple high-traffic locations at UBC Vancouver, including the AMS Nest, Life Building, Buchanan Complex, Student Recreation Centre (SRC), and the Allard Law Library. The setup of the survey and collection of responses were managed jointly by the team.

Research Project Presentation

The project title, group name, and hypothesis were written and announced by Nayah who also uploaded the presentation slides. Diana wrote and presented the research question and recommendations. Por wrote and presented on the participants and demographics. The conditions section was written by Sama but presented by Nayah. Shreya was responsible for writing and

presenting the measures and implications section. The main findings were written and presented by both Por and Mira.

Final Report

The executive summary was written by Diana. Sama wrote the introduction, and Nayah contributed the research question and hypothesis. The methods section was written by Diana and Por. The results section was written by Mira. The discussion was written by Shreya and Por. Recommendations for the client were written by Nayah. The references and appendices were compiled by Shreya Sanjeev with the exception of Appendix H which was done by Nayah and Appendix G which was compiled by Mira. All team members attended project meetings with Dr. Zhao, including the discussion, approval, and statistics check-in meeting.