

Supplementary A

Comparison of general characteristics of high and low dining expense groups

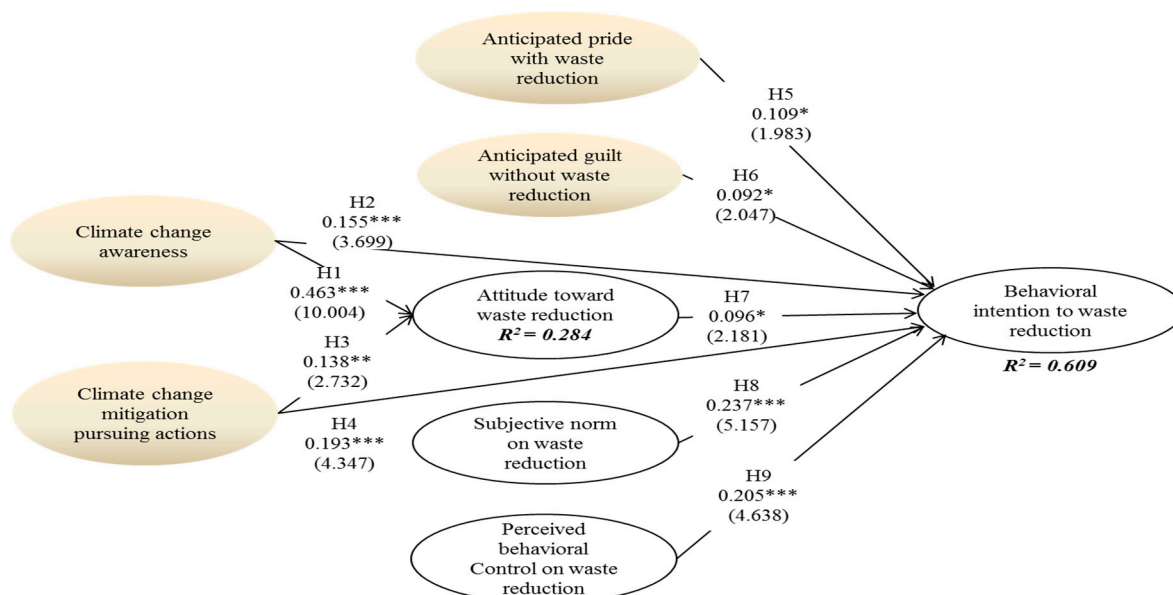
Characteristics	High ^a (%)	Low ^b (%)
Frequency of eating out		
Less than 5 times per month	47.5	30.2
5 – 14 times per month	43.5	39.1
15 times and over per month	9.0	30.7
Purpose of dining out		
Date	22.6	15.1
Social gathering	31.1	28.1
Family gathering	40.6	29.3
Business meeting	2.3	5.0
Celebration of special occasions	2.3	1.0
Other	1.1	21.6
Average spend per person		
> 20,000 Korean Won (KRW)	0.0	100.0
= 20,000 KRW	0.0	0.0
< 20,000 KRW	100.0	0.0
Eating style		
Non-vegetarian	77.9	78.4
Vegetarian	21.5	19.6
Vegan	0.6	2.0
Practicing waste reduction at work		
Somewhat agree and agree	54.3	61.4
Strongly agree	4.5	4.0
Practicing waste reduction at home		
Somewhat agree and agree	63.7	66.3
Strongly agree	4.0	6.0
Restaurant style recently visited		
Environmentally neutral restaurant	57.6	66.4
Environmentally friendly restaurant	37.9	29.1
Vegetarian restaurant	2.8	2.0
Vegan restaurant	0.6	0.5
Others	1.1	2.0
Restaurant classification recently visited		
Upscale full-service restaurant	5.6	0.5
Casual/family full-service restaurant	68.3	70.8
Hotel restaurant	0.0	1.0
Limited service (fast food) restaurant	4.0	14.6
Café	2.3	1.0
Buffet restaurant	18.6	10.6
Speciality food service (e.g., caterer)	0.6	0.5
Other	0.6	1.0

Note: *US\$ 1 = KRW (Korean Won) 1,147 as of May 1, 2019.

High^a: high group (n=177); Low^b: low group (n=199).

Supplementary B

Entire model considering seven control variables.



Note: Seven control factors of age, gender, educational level, marital status, occupation, monthly household income, and residential district were inserted between anticipated pride and behavioral intention to waste reduction which has the lowest t-value among the significant hypotheses.

Supplementary C

Survey on waste reduction for sustainability at restaurants

We are conducting a study regarding waste reduction behaviors for sustainability at restaurants. Your sincere response contributes to the improvement of environments and sustainability of the planet. Your response is completely anonymous and will be used only for academic purpose.

We would greatly appreciate your time and cooperation in completing this questionnaire. Thank you very much!

Researcher:

Researchers' names are eliminated for anonymity.

April 25 – May 15, 2019

Note 1: In this survey, the term '**waste reduction for sustainability at restaurants**' is defined as a practice reducing food waste, water use, energy consumption (e.g., electricity, oil, natural gas), use of disposable products, use of plastic products and/or a practice recycling and/or the use of renewable energy and resources at restaurants for mitigating climate change, protecting the environment, resolving fine dust.

Note 2: In this survey, the term '**vegetarian**' is defined as a person who does not eat the products or by-products of animal and fish slaughter, such as meat and fish.

Note 3: In this survey, the term '**vegan**' is defined as a person who does not eat any animal products, such as meat, fish, eggs, milk, cheese or honey.

Note 4: In this survey, the term '**flexitarian**' is defined as a vegetarian or vegan, but occasionally eat by reducing meat consumption when unavailable to get vegetable food.

Screen question (SQ)

SQ1. In the past month, have you eaten out at any restaurants?

① No: End (Thank you for your participation in this survey).

② Yes If you checked “yes,” please answer the following DQ1 question.

Demographic characteristics [Quota]

DQ1. What is your gender?

① Male ② Female

DQ2. What is your year of birth? _____ year

① Below 20 years old: 2000 and after

② 20~29 years old: 1999~1990

③ 30~39 years old: 1989~1980

④ 40~49 years old: 1979~1970

⑤ 50~59 years old: 1969~1960

⑥ 60 years old or over: 1959 and before

General information

GQ1. On average how often do you dine at restaurants per month?
_____ times

GQ2. What is the main purpose of dining out at restaurants [choose one]?

① Date ② Social gathering with friends or colleagues ③ Family gathering

④ Business meeting ⑤ Celebration of special occasions (e.g., birthday, anniversary)

⑥ Other (please specify):

GQ3. When you dine at restaurants, what is your average spend (per person)?

_____ Korean won

GQ4. How would you describe your normal style of eating?*

① Non-vegetarian ② Vegetarian ③ Vegan ④ Other (please specify): _____

*Added a table regarding foods what can eat and cannot eat by each eating style in the Korean questionnaire.

GQ5. I practice waste reduction (e.g., food, energy, materials, water, resources) for reasons of sustainability (e.g., mitigating climate change, protecting the environment) at work.

Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
1	2	3	4	5	6	7

GQ6. I reduce waste reduction (e.g., food, energy, materials, water, resources) for reasons of sustainability (e.g., mitigating climate change, protecting the environment) at home.

Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
1	2	3	4	5	6	7

CQ0. Please provide the name and type of the restaurant in which you have most recently dined:

CQ0_1. What is the name of the restaurant in which you have most recently dined?

CQ0_2. Please select the following areas that best describe the restaurant in which you have most recently dined.

① Environmentally neutral restaurant (not primarily using organic, wholefoods, and/or local ingredients) ② Environmentally friendly restaurant (primarily uses organic, wholefoods, and/or local ingredients) ③ Vegetarian restaurant ④ Vegan restaurant ⑤ Others: _____

CQ0_3. Please select the following classifications that best describe the restaurant that you have eaten out.**

**Added a detailed table regarding examples for each restaurant classification in the Korean questionnaire.

① Upscale full service restaurant ② Casual/family full service restaurant
③ Hotel restaurant ④ Limited service (fast food) restaurant
⑤ Café ⑥ Buffet restaurant
⑦ Speciality food service (e.g., caterer) ⑧ Other (please specify): _____

Construct

When you answer the following questions, please consider your answers in light of your recent restaurant experiences.

Please choose the closest one to your dining experience [Select one for each] (1: strongly disagree; 2: disagree; 3: somewhat disagree; 4: neither agree nor disagree; 5: somewhat agree; 6: agree; 7: strongly agree).

CQ1. Climate change awareness	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
1. I am concerned about climate change.	1	2	3	4	5	6	7
2. I am alarmed about the reasons of climate change.	1	2	3	4	5	6	7
3. I am worried about the consequences of climate change.	1	2	3	4	5	6	7
4. I am concerned about the threat of fine dust.	1	2	3	4	5	6	7
5. I am alarmed about the reasons for fine dust.	1	2	3	4	5	6	7
6. I am worried about the consequences of fine dust.	1	2	3	4	5	6	7

CQ2. Climate change mitigation pursuing actions	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
1. I prefer renewable energy sources to fossil fuel to mitigate climate change.	1	2	3	4	5	6	7
2. I prefer vegetarian dishes to a meat diet in order to mitigate climate change.	1	2	3	4	5	6	7
3. I prefer vegan dishes to a vegetarian diet in order to mitigate climate change.	1	2	3	4	5	6	7
4. I prefer artificially grown meat* in order to mitigate climate change. *Added the explanation of artificial meat in Korean in the Korean questionnaire.	1	2	3	4	5	6	7
5. I prefer taking trains than aircraft to mitigate climate change.	1	2	3	4	5	6	7
6. I prefer walking than taking automobiles in order to mitigate climate change.	1	2	3	4	5	6	7

7. I prefer renewable energy sources to fossil fuel to resolve fine dust in the atmosphere.	1	2	3	4	5	6	7
8. I prefer taking trains than aircraft to lessen fine dust in the atmosphere.	1	2	3	4	5	6	7
9. I prefer walking than taking automobiles in order to reduce fine dust in the atmosphere.	1	2	3	4	5	6	7

CQ3. Anticipated pride with waste reduction	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
1. I will be very proud of reducing waste while dining out.	1	2	3	4	5	6	7
2. I will feel very accomplished by reducing waste while dining out.	1	2	3	4	5	6	7
3. I will be confident that I am reducing waste at restaurants.	1	2	3	4	5	6	7

CQ4. Anticipated guilt without waste reduction	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
1. I will be feeling guilty if I do not reduce waste while dining out.	1	2	3	4	5	6	7
2. I will be remorseful if I do not reduce waste while dining out.	1	2	3	4	5	6	7
3. I will be sorry if I do not reduce waste at restaurants.	1	2	3	4	5	6	7

CQ5. Attitude toward waste reduction	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
1. Reducing waste during dining out is an affirmative behavior.	1	2	3	4	5	6	7
2. Reducing food waste during dining out is a beneficial behavior.	1	2	3	4	5	6	7
3. Reducing water waste is an essential behavior at restaurants.	1	2	3	4	5	6	7
4. Reducing natural resource waste is a legitimate behavior at restaurants.	1	2	3	4	5	6	7

CQ6. Subjective norm on waste reduction	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
1. Most people who are important to me think I should practice waste reduction activities while dining out.	1	2	3	4	5	6	7
2. Most people who are important to me would want me to practice recycling activities while dining out.	1	2	3	4	5	6	7
3. Most people who are important to me support my participation in waste reduction at a restaurant.	1	2	3	4	5	6	7

CQ7. Perceived behavioral control	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
1. Whether or not I engage in waste reduction behaviors while dining at a restaurant is completely up to me.	1	2	3	4	5	6	7
2. I am confident that if I want, I can reduce waste while dining at a restaurant.	1	2	3	4	5	6	7
3. I have enough opportunities to reduce waste while dining at a restaurant.	1	2	3	4	5	6	7

CQ8. Behavioral intention to waste reduction	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
1. I am willing to participate in pro-environmental practices at restaurants.	1	2	3	4	5	6	7
2. I try to participate in almost all pro-environmental practices at restaurants to reduce waste.	1	2	3	4	5	6	7
3. I participate in reducing waste practices at restaurants.	1	2	3	4	5	6	7

Demographic characteristics

DQ3. What is the highest level of education you have completed?

① High school diploma or lower ② 2-year degree ③ 4-year degree ④ Graduate School

or Graduate Degree

DQ4. What is your marital status?

① Single ② Married ☒ ③ Divorced ④ Widow(er) ⑤ Other (specify) _____

DQ5. What is your monthly household income?

① Less than 2.00 million won ② 2.00-3.99 million won ③ 4.00-5.99 million won ④ 6.00-7.99 million won ⑤ 8.00 million won or more

DQ6. What is your main occupation?

① Professional (e.g., attorney, engineer, architect) ② Entrepreneur/Self-employed
③ Service employee ④ Office/Administrative/Clerical ⑤ Civil Servant (Government)
⑥ Home maker ⑦ Retiree ⑧ Student ⑨ Unemployed ⑩ Other (specify) _____

DQ7. Where are you living now?

① Seoul ☒ ② Busan ☒ ③ Daegu ☒ ④ Incheon ☒ ⑤ Daejeon ☒ ⑥ Ulsan ☒ ⑦ Gwangju ☒ ⑧ Sejong
☒ ⑨ Gyeonggi ☒ ⑩ Gangwon ☒ ⑪ Chungbuk ☒ ⑫ Chungnam ☒ ⑬ Jeonbuk ☒ ⑭ Jeonnam
☒ ⑮ Kyungbuk ☒ ⑯ Gyeongnam ⑰ Jeju

Thank you very much for your time and participation!