

Supplementary Materials: Environmental Consciousness in Daily Activities Measured by Negative Prompts

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Table S1. Gender.

	Male	Female
Survey	49.9	50.1
Census	50.0	50.0

Table S2. Age.

	15–19	20–29	30–39	40–49	50–59	60–69
Survey	3.3	14.3	22.8	21.0	19.9	18.6
Census	6.8	15.4	20.3	18.8	18.3	20.4

Table S3. Region of residence.

	Hokkaido	Tohoku	Kanto	Chubu	Kansai	Chugoku	Shikoku	Kyushu, Okinawa
Survey	4.3	7.0	34.4	16.7	17.8	5.7	3.0	11.0
Census	4.2	7.0	34.8	16.8	17.7	5.7	2.9	10.9

Table S4. Occupation of respondents.

Occupation	(%)
company employee	35.0
stay-at-home	18.2
part-time employment	15.2
unemployed (retired)	9.6
student	6.8
self-employed	6.7
government employee	4.2
professional	2.8
others	1.6

Table S5. Household income after tax.

(Million Yen)	(%)
under 2	10.6
2–4	21.5
4–6	22.1
6–8	14.3
8–10	8.5
10–12	3.9
12–15	2.4
more than 15	1.7
don't want to answer	15.0

Table S6. Number of people in household.

Number of People	(%)
1	15.1
2	26.3
3	25.4
4	22.0
5	7.5
6	2.6
more than 7	1.1

Table S7. Difference from mean of sub-scale scores by gender.

	A	B	C	D	E
male	0.05	-0.10	0.02	0.08	-0.04
female	-0.05	0.09	-0.02	-0.08	0.04

Table S8. Difference from mean of sub-scale scores by age.

	A	B	C	D	E
10's	0.11	-0.03	0.23	0.29	0.13
20's	0.17	-0.15	0.24	0.25	0.16
30's	0.08	-0.08	0.11	0.09	0.09
40's	0.02	-0.03	0.00	-0.03	0.01
50's	-0.06	0.06	-0.11	-0.08	-0.07
60's	-0.20	0.19	-0.25	-0.23	-0.19

Table S9. Difference from mean of sub-scale scores by region of residence.

	A	B	C	D	E
Hokkaido	0.00	-0.03	0.00	-0.04	0.00
Tohoku	0.01	0.02	-0.01	-0.01	-0.01
Kanto	-0.02	0.02	-0.01	-0.02	-0.01
Chubu	0.02	-0.03	0.01	0.04	0.02
Kansai	0.03	-0.02	0.02	0.02	0.02
Chugoku	0.01	0.00	0.02	0.02	0.00
Shikoku	0.02	-0.02	0.03	0.03	0.00
Kyushu, Okinawa	-0.03	0.03	-0.03	-0.03	-0.01

Table S10. Difference from mean of sub-scale scores by occupation.

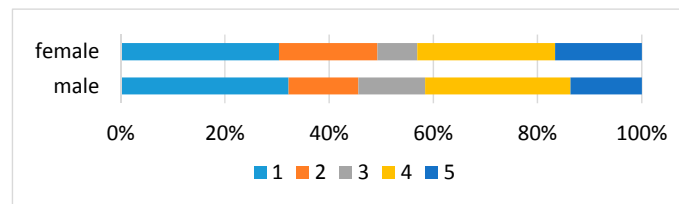
	A	B	C	D	E
company employee	0.05	-0.09	0.05	0.10	0.01
self-employed	0.01	-0.02	-0.06	-0.10	-0.06
professional	-0.01	0.07	-0.08	-0.08	-0.06
government employee	0.02	-0.01	-0.05	0.07	-0.10
stay-at-home	-0.10	0.14	-0.09	-0.15	0.00
part-time employment	-0.01	0.02	0.02	-0.02	0.04
student	0.12	-0.05	0.20	0.24	0.14
unemployed (retired)	-0.05	0.02	-0.08	-0.12	-0.09
others	-0.08	0.10	-0.13	-0.25	-0.03

Table S11. Difference from mean of sub-scale scores by household income after tax.

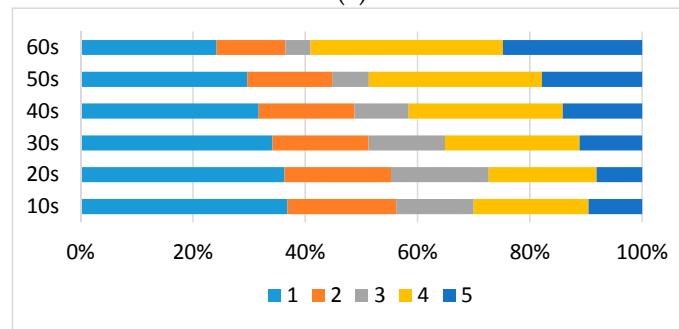
	A	B	C	D	E
under 2	0.07	-0.05	0.07	0.03	0.05
2-4	0.01	-0.01	0.04	0.01	0.03
4-6	-0.01	0.01	0.00	0.00	0.00
6-8	-0.03	0.04	-0.04	-0.01	-0.03
8-10	-0.03	0.04	-0.06	-0.03	-0.07
10-12	-0.02	0.05	-0.06	-0.07	-0.07
12-15	-0.04	0.10	-0.10	-0.07	-0.08
more than 15	-0.06	0.11	-0.12	-0.13	-0.10

Table S12. Difference from mean of sub-scale scores by number of people in household.

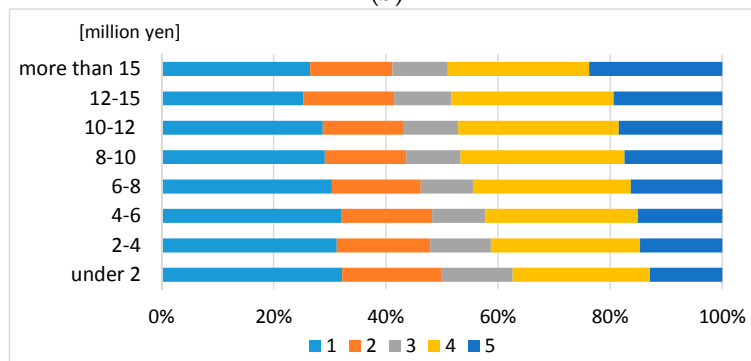
Number of People	A	B	C	D	E
1	0.09	-0.10	0.11	0.07	0.01
2	-0.06	0.07	-0.08	-0.11	-0.04
3	-0.01	0.00	0.00	-0.01	0.00
4	0.02	-0.01	0.02	0.06	0.03
5	0.01	-0.01	0.01	0.06	0.04
6	-0.02	0.02	-0.01	0.03	0.01
more than 7	-0.02	0.02	-0.01	0.04	0.04



(a)



(b)



(c)

Figure S1. Cont.

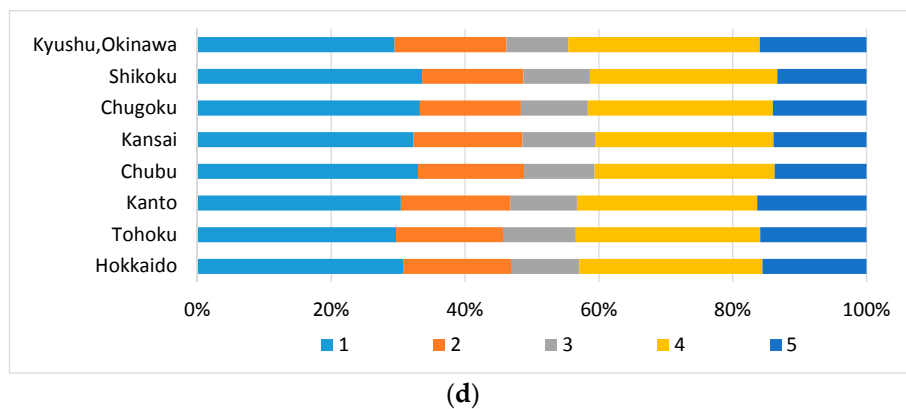


Figure S1. Cluster Ratio in (a) Gender; (b) Age; (c) Household income after tax; (d) Region in 5 clusters.

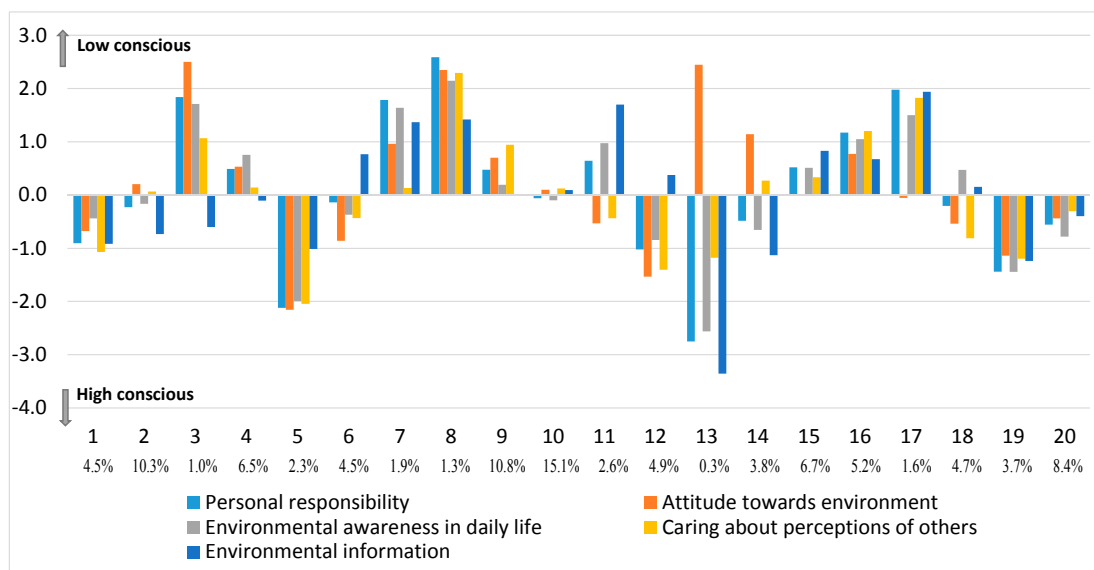


Figure S2. Cluster analysis results (20 clusters).

Table S13. Top 10 frequently answered behaviors by age and gender; (Q2) Behaviors good for the environment; (Q3) Behaviors uncertain of as to whether good or bad; (Q4) Behaviors generally thought to be good while respondent disagree.

(Q2)

	m10s	m20s	m30s	m40s	m50s	m60s	f10s	f20s	f30s	f40s	f50s	f60s
1	Nothing	Nothing	Nothing	<u>Power saving</u>	<u>Power saving</u>	<u>Car</u>	<u>Turn off light</u>	<u>Turn off light</u>	<i>Garbage separation</i>	<i>Garbage separation</i>	<i>Eco bag</i>	<i>Reduce garbage</i>
2	<u>Water saving</u>	Not use	<u>Power saving</u>	Nothing	<u>Car</u>	Can do	<u>Turn off frequently</u>	<i>Eco bag</i>	<i>Eco bag</i>	<i>Eco bag</i>	<i>Reduce garbage</i>	<i>Raw garbage</i>
3	<u>Turn off light</u>	<u>Turn off light</u>	<u>Idling stop</u>	<u>Car</u>	<u>Walk</u>	<i>Garbage</i>	Not use	<u>Turn off frequently</u>	<i>Recycle</i>	<i>Reduce garbage</i>	Purchase	Can
4	<u>Turn off frequently</u>	<u>Power saving</u>	<i>Garbage separation</i>	<u>Idling stop</u>	Nothing	Energy saving	<i>Eco bag</i>	<u>Air conditioner</u>	Use	Use	Detergent	Shopping
5	<i>Plastic bag</i>	<u>Water saving</u>	<u>Eco driving</u>	<u>Turn off frequently</u>	Energy saving	Be conscious	<i>Water</i>	Not use	<u>Air conditioner</u>	Not use	Use	<i>Garbage</i>
6	Not use	<u>Turn off frequently</u>	<u>Turn off frequently</u>	<u>Turn off light</u>	Reduce using	Reduce using	<i>Water saving</i>	Use	<u>Water saving</u>	<i>Recycle</i>	<i>Garbage separation</i>	Do
7	Power saving	<u>Air conditioner</u>	<u>Turn off light</u>	<u>Walk</u>	<u>No car</u>	Wasting	Not receive	Unplug	Purchase	Purchase	<i>Raw garbage</i>	Be conscious
8	Unplug	<u>Public transport</u>	Not use	<u>Eco driving</u>	<u>Eco driving</u>	Make effort	<i>No littering</i>	<u>Water saving</u>	Not use	Detergent	Bath	Detergent
9	<u>Bicycle</u>	<u>Bicycle</u>	<u>Bicycle commute</u>	<u>Eco drive</u>	<u>Public transport</u>	<u>No car</u>	<i>Plastic bag</i>	<i>Recycle</i>	<i>Reduce garbage</i>	Bath	Wash	Yard
10	Not receive	Use	<i>Recycle</i>	<u>No car</u>	<u>Private car</u>	Do	Use	Not receive	Detergent	<u>Bicycle, Walk</u>	<i>Garbage</i>	<i>Garbage separation</i>

Bold & underline: Power saving, **Bold:** Purchase, *Italic:* Garbage discharge, *Italic & underline:* Resource saving (recycle), underline: Transport, wavy line: water saving.

(Q3)

	m10s	m20s	m30s	m40s	m50s	m60s	f10s	f20s	f30s	f40s	f50s	f60s
1	Nothing	Nothing	Nothing	Nothing	Nuclear power	Nuclear power	Nothing	Nothing	<i>Garbage separation</i>	<i>Garbage separation</i>	<u>Wash</u>	Think
2	<u>Power saving</u>	<u>Power saving</u>	<i>Garbage separation</i>	<i>Garbage separation</i>	<u>Hybrid car</u>	<u>Car</u>	<u>Power saving</u>	<u>Power saving</u>	Nothing	Don't know	<u>Water</u>	<u>Water</u>
3	<u>Water saving</u>	<i>Recycle</i>	Power saving	Power saving	Solar power	Environment	<u>Turn off light</u>	<i>Eco bag</i>	Don't know	<i>Recycle</i>	<u>Wash for recycling</u>	<u>Wash</u>
4	<u>Disposable chopsticks</u>	<i>Eco bag</i>	<u>Eco car</u>	<u>Eco car</u>	<u>Car</u>	Doubt	<u>Turn off frequently</u>	<i>Garbage separation</i>	<i>Eco bag</i>	No idea	No idea	Detergent
5	Not use	<i>Garbage separation</i>	<u>Idling stop</u>	Replacement	<u>All-electric house</u>	Solar power	Don't know	Don't know	<i>Recycle</i>	<u>Wash for recycling</u>	Detergent	Discharge

Table S13. Cont.

	m10s	m20s	m30s	m40s	m50s	m60s	f10s	f20s	f30s	f40s	f50s	f60s
6	<u>Eco bag</u>	<u>Eco car</u>	<u>Hybrid car</u>	<u>Hybrid car</u>	<u>Eco car</u>	Action	<u>Water saving</u>	<u>Turn off frequently</u>	<u>Disposable chopsticks</u>	<u>Water</u>	Discharge	Clean
7	<u>Air conditioner</u>	<u>Water saving</u>	<u>Recycle</u>	<u>Idling stop</u>	<u>Electric car</u>	Unshaken	<u>Air conditioner</u>	<u>Turn off light</u>	<u>Power saving</u>	Plastic	<u>Garbage</u>	No idea
8	<u>Recycle</u>	<u>Plastic bag</u>	Replacement	Nuclear power	Thermal power	Disposal	<u>Eco bag</u>	<u>Air conditioner</u>	Not use	PET bottle	Plastic	<u>Garbage</u>
9	<u>Turn off light</u>	Purchase	<u>Eco bag</u>	Solar power	Nuclear power	Wonder good or not	<u>Recycle</u>	Use	<u>Wash</u>	<u>Wash</u>	Don't know	<u>Reduce garbage</u>
10	<u>Turn off frequently</u>	<u>Disposable chopsticks</u>	PET bottle	<u>Electric car</u>	CO ₂	Think	Electricity	<u>Water saving</u>	Plastic	<u>Garbage</u>	Use	Good
(Q4)												
	m10s	m20s	m30s	m40s	m50s	m60s	f10s	f20s	f30s	f40s	f50s	f60s
1	Nothing	Nothing	Nothing	<u>Eco car</u>	Nuclear power	Nuclear power	Nothing	Nothing	Nothing	Don't know	Don't know	No idea
2	Power saving	<u>Use eco bag</u>	<u>Garbage separation</u>	<u>Hybrid car</u>	<u>Electric car</u>	No idea	Don't know	Don't know	Don't know	Nothing	No idea	Think
3	Not use	<u>Recycle</u>	Power saving	Replacement	<u>Garbage separation</u>	Solar power	Use air conditioner	<u>Use eco bag</u>	<u>Use eco bag</u>	No idea	<u>Wash</u>	So-called
4	<u>Recycle</u>	Power saving	Eco car	<u>Garbage separation</u>	<u>Hybrid car</u>	Wind power	Power saving	<u>Turn off frequently</u>	<u>Garbage separation</u>	<u>Water</u>	<u>Garbage</u>	Don't know
5	<u>Plastic bag</u>	<u>Eco car</u>	<u>Idling stop</u>	<u>Idling stop</u>	Solar power	So-called	Not use	<u>Turn off light</u>	No idea	<u>Wash</u>	Use detergent	Good
6	<u>Idling stop</u>	<u>Garbage separation</u>	<u>Recycle</u>	Nuclear power	Carbon dioxide	Restart nuclear power	<u>Water saving</u>	<u>Carry my-chopsticks</u>	Not use	Use detergent	Think	Discharge
7	<u>Water saving</u>	<u>Water saving</u>	<u>Hybrid car</u>	<u>Recycle</u>	All-electric house	<u>Car</u>	<u>Recycle</u>	Power saving	<u>Carry my-chopsticks</u>	Think	<u>Water</u>	<u>Garbage</u>
8	<u>Garbage separation</u>	<u>Turn off frequently</u>	Replacement	Solar power	Use	Eco products	<u>Turn off light</u>	<u>Garbage separation</u>	Use air conditioner	PET bottle	<u>Wash for recycling</u>	<u>Water</u>
9	<u>Electric car</u>	<u>Carry my-chopsticks</u>	<u>Use eco bag</u>	Power saving	Power saving	Energy saving	<u>Turn off frequently</u>	<u>Water saving</u>	PET bottle	Supermarket	Discharge	Eco products
10	<u>Use eco bag</u>	<u>Idling stop</u>	<u>Use disposable chopsticks</u>	<u>Car</u>	<u>Garbage incineration</u>	Good	<u>Water</u>	Not use	<u>Use disposable chopsticks</u>	Think of nothing	<u>Garbage separation</u>	Clean

Table S14. Top 10 frequently answered behaviors by income; (Q2) Behaviors good for the environment; (Q3) Behaviors uncertain of as to whether good or bad; (Q4) Behaviors generally thought to be good while respondent disagree.

(Q2) (million yen)

	Under 2	2–4	4–6	6–8	8–10	10–12	12–15	More than 15
1	Nothing	<i>Garbage separation</i>	<i>Garbage separation</i>	Power saving	Wasting	<u>Car</u>	<u>Public transport</u>	Use
2	Not use	<i>Reduce garbage</i>	Power saving	<u>Car</u>	<u>Walk</u>	<u>Recycle</u>	<u>Hybrid car</u>	<u>Eco car</u>
3	<u>Water saving</u>	<i>Garbage</i>	<u>Eco bag</u>	Reduce using	Purchase	Turn off frequently	<u>Walk</u>	<u>Public</u>
4	Unplug	Saving	<u>Idling stop</u>	Use	<u>Recycle</u>	Purchase	Power saving	<u>Public transport</u>
5	Not receive	Can	<u>Recycle</u>	Turn off light	Use	Energy saving	Reduce using	<u>Eco driving</u>
6	Air conditioner	Environment	Be conscious	Set temperature	<u>Public transport</u>	Wasting	<u>Recycle</u>	<u>Hybrid car</u>
7	<i>No littering</i>	Shopping	<u>Car</u>	<u>Public transport</u>	Solar power	<u>Public transport</u>	Use	Wasting
8	<i>Throw away</i>	No discharge	<u>Eco driving</u>	Turn off frequently	Cooling and heating	<u>Hybrid car</u>	Ride	<u>Reuse</u>
9	<u>Water</u>	Thing	Solar power	<u>Recycle</u>	Ride	<u>Eco car</u>	Purchase	<u>Transportation</u>
10	Saving	<i>Raw garbage</i>	<u>Can recycle</u>	Low	<u>Bicycle, Walk</u>	Turn off light	Use long time	packaging

Bold & underline: Power saving, **Bold:** Purchase, *Italic:* Garbage discharge, *Italic & underline:* Resource saving (recycle), underline: Transport, wavy line: water saving, fence-line: used in co-occurrence network analysis.

(Q3) (million yen)

	Under 2	2–4	4–6	6–8	8–10	10–12	12–15	More than 15
1	Don't know	<i>Garbage</i>	<i>Garbage separation</i>	Use	<u>Wash</u>	<u>Hybrid car</u>	Use	<u>Electric car</u>
2	Power saving	Think	<u>Eco bag</u>	<u>Hybrid car</u>	Nuclear power	<i>Garbage separation</i>	<u>Disposable chopsticks</u>	<i>Garbage</i>
3	<u>Eco bag</u>	Good	<u>Car</u>	All-electric house	<i>Garbage separation</i>	Purchase	<u>Electric car</u>	Environment
4	Nothing	Go out	<u>Eco car</u>	Replacement	<u>Hybrid car</u>	PET bottle	<u>Carry my-chopsticks</u>	<i>Collection</i>
5	<i>Garbage</i>	Detergent	<u>Recycle</u>	<u>Idling stop</u>	<u>Water</u>	Use	<u>Recycle</u>	<i>Thermal power</i>
6	<u>Water saving</u>	So-called	<i>Combustible garbage</i>	Not use	Replacement	<u>Recycle</u>	PET bottle	Think
7	Not use	Action	<u>Idling stop</u>	Solar power	<u>Eco car</u>	Nuclear power	<u>Hybrid car</u>	Carbon dioxide
8	<i>Reduce garbage</i>	Convenience store	Replacement	<u>Wash for recycling</u>	<i>Throw away</i>	<u>Carry my-chopsticks</u>	<u>Recycled paper</u>	Purchase
9	<i>Separation</i>	Think	Purchase	<u>Disposable chopsticks</u>	<u>Car</u>	<u>Electric car</u>	Consumption	Frequency
10	<u>Bag</u>	<i>Garbage incineration</i>	Wonder good or not	Replacement	Do	<u>Water</u>	Bottle	Saving

Table S15. Top 10 frequently answered behaviors by region of residence; (Q2) Behaviors good for the environment; (Q3) Behaviors uncertain of as to whether good or bad; (Q4) Behaviors generally thought to be good while respondent disagree.

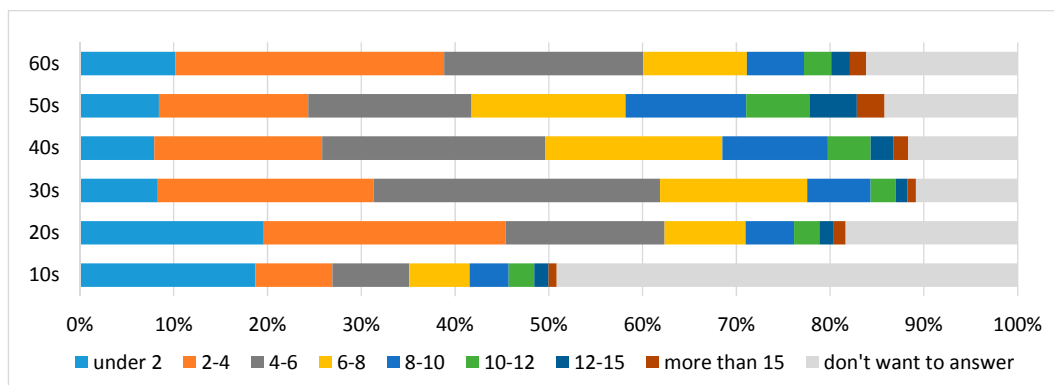
(Q2)

	Hokkaido	Tohoku	Kanto	Chubu	Kansai	Chugoku	Shikoku	Kyushu, Okinawa
1	<u>Power saving</u>	<i>Garbage separation</i>	Use	<u>Car</u>	<u>Power saving</u>	<u>Air conditioner</u>	<u>Car</u>	<u>Power saving</u>
2	<i>Garbage separation</i>	<u>Power saving</u>	<i>Garbage separation</i>	<u>Idling stop</u>	Can	<u>Turn off light</u>	<u>Air conditioner</u>	<i>Water saving</i>
3	Heating	<u>Idling stop</u>	Not use	Do	<u>Air conditioner</u>	<u>Turn off frequently</u>	Not use	<i>Eco bag</i>
4	<i>Reduce garbage</i>	<i>Eco bag</i>	<i>Reduce garbage</i>	Solar power	<u>Train</u>	<u>Idling stop</u>	<i>Recycle</i>	<u>Turn off frequently</u>
5	Nothing	<i>Water saving</i>	<i>Eco bag</i>	<u>Eco driving</u>	Reduce using	<u>Bicycle</u>	<u>Set temperature</u>	<i>Raw garbage</i>
6	<u>Walk</u>	<u>Turn off frequently</u>	Not receive	<u>Eco driving</u>	Bath	Do	<u>Temperature</u>	<i>Reduce garbage</i>
7	<u>Idling</u>	<u>Car</u>	<u>Train</u>	Wasting	<u>Keep off</u>	<u>Set temperature of air conditioner</u>	<u>Bicycle</u>	Use
8	<u>Bicycle, Walk</u>	<i>No litter garbage</i>	<i>Water saving</i>	Close	<u>No car</u>	Have	Close	Energy saving
9	<u>Public transport</u>	<u>Unplug</u>	<i>Plastic bag</i>	<u>Public transport</u>	<u>Bicycle</u>	<u>Temperature</u>	Saving	<i>Recycle</i>
10	<u>Power saving</u>	<u>Eco driving</u>	No purchase	Be conscious	<i>Water saving</i>	<i>Garbage</i>	<u>Idling stop</u>	<i>Pick up trash</i>

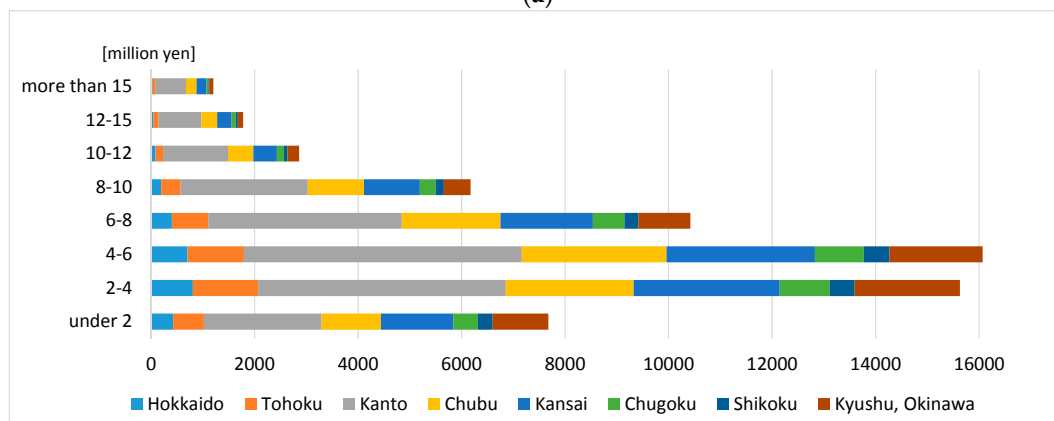
Bold & underline: Power saving, **Bold:** Purchase, *Italic:* Garbage discharge, *Italic & underline:* Resource saving (recycle), underline: Transport, wavy line: water saving, fence-line: used in co-occurrence network analysis.

(Q3)

	Hokkaido	Tohoku	Kanto	Chubu	Kansai	Chugoku	Shikoku	Kyushu, Okinawa
1	<u>Power saving</u>	Nothing	Nothing	<i>Garbage separation</i>	<i>Garbage separation</i>	<i>Recycle</i>	<i>Disposable chopsticks</i>	Nothing
2	Don't know	<u>Idling stop</u>	<i>Water saving</i>	<u>Idling stop</u>	<u>Power saving</u>	<i>Garbage</i>	<i>Recycle</i>	Don't know
3	Not use	<u>Car</u>	<u>Train</u>	Plastic	Plastic	PET bottle	Not use	No idea
4	Use	Detergent	<u>Wash</u>	<u>Wash</u>	<i>Garbage</i>	<u>Electricity</u>	No idea	Use
5	No idea	Nuclear power	<i>Disposable chopsticks</i>	<i>Garbage</i>	<i>Separation</i>	<u>Hybrid car</u>	<u>Car</u>	<i>Eco bag</i>
6	Think	<u>Eco car</u>	Not use	<u>No car</u>	<u>Air conditioner</u>	Environment	Nuclear power	<u>Car</u>
7	<u>Eco car</u>	Purchase	Not receive	Purchase	Don't know	<i>Eco bag</i>	Think	PET bottle
8	Saving	Saving	<u>Turn off frequently</u>	<u>Eco car</u>	<u>Turn off light</u>	<u>Car</u>	Solar power	<u>Hybrid car</u>
9	Heating	Ecological home appliances	<i>Reduce garbage</i>	Replacement	<u>Train</u>	Wonder good or not	Use	<u>Eco car</u>
10	<i>Eco bag</i>	Wood stove	<i>Collection</i>	<u>All-electric house</u>	Supermarket	Solar power	Good	<u>All-electric house</u>



(a)



(b)

Figure S3. Household income after tax; (a) by age; (b) by region of residence.