

Appendix B: Index of Item-Objective Congruence Data and Calculations

Constructs: A) Knowledge, B) Behavior, C) Barriers

Item #	Item	Number of Responses Matching the Construct	μ_k
1	Thinking about what's typical for you, how often do you compost your kitchen scraps?	10	1
2	Thinking about what's typical for you, how often do you prepare meals in your kitchen?	10	1
3	Thinking about what's typical for you, how often do you visit a garden that grows food?	7	0.7
4	Rate your level of agreement for this statement: I don't have time to compost.	9	0.9
5	Rate your level of agreement for this statement: I don't have room to compost.	8	0.8
6	Rate your level of agreement for this statement: compost smells bad.	5	0.5
7	Paper towel rolls can be composted.	8	0.8
8	Plastic bags can be composted.	8	0.8
9	Onion skins can be composted.	9	0.9

Item #	Item	Number of Responses for ALL Constructs	μ
1	Thinking about what's typical for you, how often do you compost your kitchen scraps?	14	0.12
2	Thinking about what's typical for you, how often do you prepare meals in your kitchen?	17	0.14
3	Thinking about what's typical for you, how often do you visit a garden that grows food?	17	0.12
4	Rate your level of agreement for this statement: I don't have time to compost.	16	0.13
5	Rate your level of agreement for this statement: I don't have room to compost.	11	0.09
6	Rate your level of agreement for this statement: compost smells bad.	13	0.12
7	Paper towel rolls can be composted.	10	0.08
8	Plastic bags can be composted.	11	0.09
9	Onion skins can be composted.	15	.12

Constructs: A) Behavior, B) Values, C) Social Norms

Item #	Item	Number of Responses Matching the Construct	μ_k
1	Rate how important it is to you that composting reduces the environmental impact of garbage.	10	1
2	Rate how important it is to you that composting recycles kitchen scraps into garden soil.	10	1
3	Rate how important it is to you that if people composted, we could keep about half of our garbage out of landfills.	9	0.9
4	Rate your level of agreement for this statement: My friends think composting is a good idea.	9	0.9
5	Rate your level of agreement for this statement: Many people I know like to compost.	9	0.9
6	Rate your level of agreement for this statement: Many people I know visit a community garden.	7	0.7

Item #	Item	Number of Responses for ALL Constructs	μ
1	Rate how important it is to you that composting reduces the environmental impact of garbage.	15	0.17
2	Rate how important it is to you that composting recycles kitchen scraps into garden soil.	16	0.18
3	Rate how important it is to you that if people composted, we could keep about half of our garbage out of landfills.	17	0.19
4	Rate your level of agreement for this statement: My friends think composting is a good idea.	16	0.18
5	Rate your level of agreement for this statement: Many people I know like to compost.	14	0.16
6	Rate your level of agreement for this statement: Many people I know visit a community garden.	12	0.13

Constructs: A) Knowledge, B) Behavior, C) Barriers

Set 1, Q1

$$I_{ik} = \frac{(\underline{3})}{(2 \times 3 - 2)} \times (1 - 0.12) = 0.66$$

Set 1, Q2

$$I_{ik} = \frac{(\underline{3})}{(2 \times 3 - 2)} \times (1 - 0.14) = 0.65$$

Set 1, Q3

$$I_{ik} = \frac{(\underline{3})}{(2 \times 3 - 2)} \times (0.7 - 0.12) = 0.44$$

Set 1, Q4

$$I_{ik} = \frac{(\underline{3})}{(2 \times 3 - 2)} \times (0.9 - 0.13) = 0.58$$

Set 1, Q5

$$I_{ik} = \frac{(\underline{3})}{(2 \times 3 - 2)} \times (0.8 - 0.09) = 0.53$$

Set 1, Q6

$$I_{ik} = \frac{(\underline{3})}{(2 \times 3 - 2)} \times (0.5 - 0.12) = 0.29$$

Set 1, Q7

$$I_{ik} = \frac{(\underline{3})}{(2 \times 3 - 2)} \times (0.8 - 0.08) = 0.54$$

Set 1, Q8

$$I_{ik} = \frac{(\underline{3})}{(2 \times 3 - 2)} \times (0.8 - 0.09) = 0.53$$

Set 1, Q9

$$I_{ik} = \frac{(\underline{3})}{(2 \times 3 - 2)} \times (0.9 - 0.12) = 0.59$$

Constructs: A) Behavior, B) Values, C) Social Norms

Set 2, Q1

$$I_{ik} = \frac{(\underline{3})}{(2 \times 3 - 2)} \times (1 - 0.17) = 0.62$$

Set 2, Q2

$$I_{ik} = \frac{(\underline{3})}{(2 \times 3 - 2)} \times (1 - 0.18) = 0.62$$

$$(2 \times 3 - 2)$$

Set 2, Q3

$$I_{ik} = \left(\frac{3}{2 \times 3 - 2} \right) \times (0.9 - 0.19) = 0.53$$

Set 2, Q4

$$I_{ik} = \left(\frac{3}{2 \times 3 - 2} \right) \times (0.9 - 0.18) = 0.54$$

Set 2, Q5

$$I_{ik} = \left(\frac{3}{2 \times 3 - 2} \right) \times (0.9 - 0.16) = 0.56$$

Set 2, Q6

$$I_{ik} = \left(\frac{3}{2 \times 3 - 2} \right) \times (0.7 - 0.13) = 0.43$$