Supplementary 1: Materials

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1. Aim

In this supplementary file, we present the materials employed in all the analyses and their detailed descriptions. Our materials consist of two datasets:

- Dataset [1]: 584 observations collected from 15th May to 28th May 2020
- Dataset [2]: 503 observations collected from 15th May to 25th May 2020

2. Survey collection

On 15th May 2020, we started the survey collection by posting questionnaires on multiple communities of Animal Crossing: New Horizons (ACNH) players on Facebook, Reddit, and Discord servers. Before posting, we had contacted the admin and moderator team of each community for validation. During the validation process, the purpose and contents of the questionnaires were clearly explained to comply with the community's rules and standards. After being approved, the questionnaire was published with the validation of the admin/moderator team and a clear explanation of the study's purpose. The respondents would be asked to read and agree to a consent form before doing the questionnaire. Also, we provided \$5 Amazon gift cards to the first hundred respondents and 2\$ Amazon gift cards to the next two hundred respondents as thank-you presents. Table S1_1 summarizes the information of Animal Crossing communities in which the data collection was conducted.

Table S1_1. Animal Crossing communities across platforms where we conducted the data collection.

Order	Community	Platform	Starting date
1	Cộng đồng Nintendo Switch Việt Nam - SwitchVN Community	Facebook	15 th May 2020
2	CLB địa chủ Animal Crossing New Horizons - Nintendo Switch Việt Nam	Facebook	15 th May 2020
3	Animal Crossing: New Horizons Over 25's Club	Facebook	19 th May 2020

4	r/Animal Crossing	Reddit	19 th May 2020
5	Animal Crossing Community (UK)	Facebook	24 th May 2020
6	Animal Crossing: New Horizons Philippines	Facebook	25 th May 2020
7	Animal Crossing: New Horizons Myanmar မမ	Facebook	25 th May 2020
8	Animal Crossing: Arts and Codes (ACAC)	Facebook	25 th May 2020
9	Animal Crossing: New Horizons	Discord	24 th May 2020

3. Questionnaire design

The questionnaire was designed to examine four primary aspects of ACNH players: 1) socio-demographic information, 2) game playing experience, 3) in-game behaviors, and 4) environmental perceptions.

The socio-demographic information consists of eight factors: nationality, biological sex, educational level, owning a pet/garden or not, age, ethnicity, marital status, and employment status. These factors are coded from A1 to A8, respectively. The experience of game-playing is measured by a set of 39 questions. The details are not described here due to their irrelevance.

In-game behaviors of ACNH players are examined through a set of 30 questions. The questions are self-designed to observe how players deal with environmental factors in ACNH (fish, bug, flower, tree, mystery island, and “terraforming”—the ability to modify the land).

To explore environmental perceptions of game players, we employ 15 questions of the New Environmental Paradigm (NEP) scale (Dunlap, Van Liere, Mertig, & Jones, 2000). This is seemingly the most well-known scale to measure environmental perceptions, which has been used in multiple disciplines and scenarios (Attari, DeKay, Davidson, & De Bruin, 2010; Budescu, Por, Broomell, & Smithson, 2014; de Bruin & Bostrom, 2013; Schwartz, Loewenstein, & Agüero-Gaete, 2020). The reporting of the results and limitations strictly follows the principle of Vuong (2020).

4. Data description

4.1. Raw data description

Dataset [1]: 584 observations		Dataset [2]: 503 observations																					
Geographical regions																							
<table><tr><th>Region</th><th>Count</th></tr><tr><td>Asia</td><td>161</td></tr><tr><td>EU</td><td>86</td></tr><tr><td>Other</td><td>16</td></tr><tr><td>US/Canada</td><td>321</td></tr></table>		Region	Count	Asia	161	EU	86	Other	16	US/Canada	321	<table><tr><th>Region</th><th>Count</th></tr><tr><td>Asia</td><td>119</td></tr><tr><td>EU</td><td>79</td></tr><tr><td>Other</td><td>12</td></tr><tr><td>US/Canada</td><td>293</td></tr></table>		Region	Count	Asia	119	EU	79	Other	12	US/Canada	293
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US/Canada	293

Biological sex

Sex	Count
Male	192
Female	392

Sex	Count
Male	177
Female	326

Educational Level

Education	Count
Graduate school and higher	138
High school	125
Primary school	4
Secondary school	11
Undergraduate school	309

Education	Count
Graduate school and higher	120
High school	113
Primary school	4
Secondary school	11
Undergraduate school	258

4.2. Filtered data for estimating the probability distribution of environmental perceptions

4.3. Filtered data for estimating the probability distribution of in-game behaviors

Dataset [1]: 377 observations after filtering	Dataset [2]: 317 observations after filtering																				
Geographical regions																					
<table border="1"> <thead> <tr> <th>Region</th><th>Count</th></tr> </thead> <tbody> <tr> <td>Asia</td><td>110</td></tr> <tr> <td>EU</td><td>67</td></tr> <tr> <td>Other</td><td>14</td></tr> <tr> <td>US/Canada</td><td>186</td></tr> </tbody> </table> <p>■ Asia ■ EU ■ Other ■ US/Canada</p>	Region	Count	Asia	110	EU	67	Other	14	US/Canada	186	<table border="1"> <thead> <tr> <th>Region</th><th>Count</th></tr> </thead> <tbody> <tr> <td>Asia</td><td>78</td></tr> <tr> <td>EU</td><td>63</td></tr> <tr> <td>Other</td><td>11</td></tr> <tr> <td>US/Canada</td><td>165</td></tr> </tbody> </table> <p>■ Asia ■ EU ■ Other ■ US/Canada</p>	Region	Count	Asia	78	EU	63	Other	11	US/Canada	165
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Sex	Count																				
Male	92																				
Female	285																				
Sex	Count																				
Male	80																				
Female	237

■ Male ■ Female

■ Male ■ Female

Educational Level

Education	Count
Graduate school and higher	87
High school	90
Secondary school	9
Undergraduate school	191

Education	Count
Graduate school and higher	74
High school	82
Secondary school	9
Undergraduate school	152

■ Graduate school and higher
■ High school
■ Secondary school
■ Undergraduate school

■ Graduate school and higher
■ High school
■ Secondary school
■ Undergraduate school

In-game behavior: Collecting animals

Likelihood	Count
Likely	367
Unlikely	10

Agreement	Count
Likely	308
Unlikely	9

4.4. Filtered data for estimating the correlation between environmental perceptions and in-game behaviors

Dataset [1]: 256 observations after filtering	Dataset [2]: 210 observations after filtering												
Biological sex													
<table> <tr> <th>Sex</th><th>Count</th></tr> <tr> <td>Male</td><td>68</td></tr> <tr> <td>Female</td><td>188</td></tr> </table>	Sex	Count	Male	68	Female	188	<table> <tr> <th>Sex</th><th>Count</th></tr> <tr> <td>Male</td><td>60</td></tr> <tr> <td>Female</td><td>150</td></tr> </table>	Sex	Count	Male	60	Female	150
Sex	Count												
Male	68												
Female	188												
Sex	Count												
Male	60												
Female	150

■ Male ■ Female

■ Male ■ Female

Environmental perceptions

Agreement	Count
Agree	109
Disagree	147

■ Agree ■ Disagree

Agreement	Count
Agree	92
Disagree	118

■ Agree ■ Disagree

In-game behavior: Collecting animals

Likelihood	Count
Likely	250
Unlikely	6

Agreement	Count
Likely	205
Unlikely	5

5. References

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