Table S1. Construct and measurement items

Construct and Items	Sources
Environmental Concerns (EC)	
EC1. I am extremely worried about the serious resource waste caused without garbage classification and what it means for my future.	
EC2. I am extremely worried about the disastrous consequences caused without garbage classification and what it means for my future.	[16, 49-51, 79]
EC3. The balance of nature is very delicate and easily upset.	
EC4. Earth is like a space station with limited room and resources.	
EC5. Garbage classification promotes resources recycling and helps humans live in harmony with the environment.	
Moral norm (MN)	
MN1. I am the kind of person who would like to participate in garbage classification behavior because of the increasing environmental pollution and resource shortage.	
MN2. I would feel guilty if I did not participate in garbage classification behavior in my daily life.	[22, 24, 46, 79]
MN3. I feel morally obligated to participate in garbage classification behavior in my daily life.	
MN4. Participating in garbage classification behavior goes along with my principles of environmental protection.	
Attitudes toward garbage classification (AT)	
AT1. Participating in garbage classification is a wise behavior.	
AT2. Participating in garbage classification is a beneficial behavior.	[11, 14, 23, 26, 37]
AT3. Participating in garbage classification is an affirmative behavior.	
AT4. Participating in garbage classification behavior for resource recycling is useful.	
Environmental Benefits (EB)	
EB1. The implementation of garbage classification can reduce environmental pollution, i.e. avoid soil, air and water pollution.	
EB2. The implementation of garbage classification will contribute to resource recycling in the near future.	
EB3. The implementation of garbage classification can effectively reduce human health risks in the near future.	[6, 9, 24, 29]
EB4. Once garbage classification behavior is integrated into daily life, it will become an effective way to protect the environment.	
EB5. The implementation of garbage classification can improve environmental quality in the near future.	
Subjective Norm (SN)	
SN1. Most people who are important to me think I should participate in garbage classification (e.g., families, friends, or neighbors, etc.).	
SN2. Most people who are important to me expect me to participate in garbage classification (e.g., families, friends, or neighbors, etc.).	[23, 37, 49, 79]
SN3. I feel under social pressure to participate in garbage classification.	

SN4. Most people who I admire participate in garbage classification (e.g., families, friends, or neighbors, etc.).

Perceived Behavioral Control (PBC)

PBC1. I have sufficient time to participate in garbage classification.

PBC2. I have enough energy to participate in garbage classification.

PBC3. I find it easy to participate in garbage classification.

PBC4. Whether I participate in garbage classificationor not is completel up to me in my daily life.

[15, 33, 34]

Expectancy toward garbage classification (Exp)

Exp1. I believe I have the knowledge to behave garbage classification.

Exp2. I believe I have the skills to behave garbage classification.

Exp3. I believe I am capable of adopting garbage classification behaviors.

Exp4. I believe I can be a role model to other people by behaving garbage classification.

[28, 33]

Intention to behave garbage classification (IB)

IB1. I would prefer to take the initiative to learn local garbage classification measures, i.e. garbage classification methods, standards and specific implementation measures.

IB2. I would try to reduce garbage generation in my daily life.

IB3. I would try to dispose of garbage properly, according to quartering method : A. Recyclable B.Harmful C.Kitchen/ perishable/wet waste D. Other/dry wastes.

IB4. I would voluntarily accept punishment when I do not sort my garbage, i.e.penalties or extra duty.

[24, 48]

IB5. I would try to teach my family, friends, or neighbors how to sort garbage in my daily life.

IB6. I would try to participate in popular science education activities which are related to garbage classification.

IB7. I would try to discourage behaving without garbage classification properly if possible.