

Supplementary Materials

Supplementary Materials S1: Explanation and question used in the four cases

The following explanation and question were used in case I of this study. The English version is a translation from Japanese.

Case I

Suppose your local area has taken over an asset. Now, your generation can choose either option A or option B, using this asset. If you choose option A, your generation can receive a gain worth 360,000 yen. However, the local asset will be damaged, and the gain that the next generation (your children's generation) can receive from the local asset will be reduced by 90,000 yen. If you choose option B, your generation can receive a gain worth 270,000 yen. In this case, the local asset will not be damaged, and the next generation (your children's generation) will be able to use the local asset in the same way as your generation.

Which do you choose?

Choose option A

Choose option B

In cases II–IV, the following sentences were used instead of the sentences in the middle paragraphs above.

Case II

If you choose option A, your generation can receive a gain worth 360,000 yen. However, the local asset will be damaged, and the gain that the next generation (your children's generation) can receive from the local asset will be reduced by 90,000 yen. Your parents' generation chose this option A and did damage to the local asset.

If you choose option B, your generation can receive a gain worth 270,000 yen. In this case, the local asset will not be damaged, and the next generation (your children's generation) will be able to use the local asset in the same way as your generation. However, the gain that your generation can receive from the local asset will be smaller than the gain received by your parents' generation.

Case III

If you choose option A, your generation can receive a gain worth 360,000 yen. However, the local asset will be damaged, and the gain that the next generation (your children's generation) can receive from the local asset will be reduced by 360,000 yen. That is, the next generation can no longer use the local asset.

If you choose option B, your generation can receive a gain worth 270,000 yen. In this case, the local asset will not be damaged, and the next generation (your children's generation) will be able to use the local asset in the same way as your generation.

Case IV

If you choose option A, your generation can receive a gain worth 360,000 yen. However, the local asset will be damaged, and the gain that the next generation (your children's generation) can receive from the local asset will be reduced by 360,000 yen. That is, the next generation can no longer use the local asset. Your parents' generation chose this option A and did damage to the local asset.

If you choose option B, your generation can receive a gain worth 270,000 yen. In this case, the local asset will not be damaged, and the next generation (your children's generation) will be able to use the local asset in the same way as your generation. However, the gain that your generation can receive from the local asset will be smaller than the gain received by your parents' generation.

Supplementary Materials S2: Statements of time-perspective scales

The statements surveyed for the time-perspective scale in this study are Japanese and their English translation are shown below. Each statement is prefixed with the abbreviation of the scale it was chosen from (see next paragraph), the item number with the initial letter of the subscale, and the name of the subscale. “(R)” indicates reverse items.

CBS: scale of core beliefs about time (Shirai, 1994), ETP: time perspective scale (Shirai, 1994, 1997), CFC: consideration of future consequences (Strathman et al., 1994; Joireman et al., 2008; Inoue and Arimitsu, 2008), ZTPI: Zimbardo time perspective inventory (Zimbardo and Boyd, 1999; Shimojima et al., 2012), GCS: generative concern scale (McAdams and de St. Aubin, 1992; revised by Marushima, 2007), GBC: generativity behavior checklist (McAdams and de St. Aubin, 1992; revised by Marushima, 2007)

CBS_D1 Delayed gratification: My life’s aim is to do my best to make my dream come true.

CBS_D2 Delayed gratification: The value of what I am doing now will be known in the future.

CBS_F1 Future neglect: I am fine as long as it is fun now.

CBS_F2 Future neglect: I don't have to have prospects for the future.

CBS_F3 Future neglect: It’s no use thinking about the future that I do not know.

ETP_G1 Goal-directedness: I have a rough future plan.

ETP_G2 Goal-directedness: I am planning things with a view to the future.

ETP_G3 Goal-directedness: My future is vague and elusive. (R)

ETP_H1 Hopefulness: I have hope for my future.

ETP_H2 Hopefulness: I am confident about managing my future.

ETP_H3 Hopefulness: I feel like I have no future. (R)

ETP_S1 Self-fulfillment: My everyday life is fulfilling.

ETP_S2 Self-fulfillment: I'm bored with repeating the same things every day. (R)

ETP_S3 Self-fulfillment: I feel like I'm not my true self. (R)

ETP_A1 Acceptance of past: I can accept my past.

ETP_A2 Acceptance of past: I don't want to remember much about the past. (R)

ETP_A3 Acceptance of past: I am particular about past events. (R)

CFC_F1 Future: I consider how things might be in the future, and try to influence those things with my day to day behavior.

CFC_F2 Future: Often I engage in a particular behavior in order to achieve outcomes that may not result for many years.

CFC_F3 Future: I am willing to sacrifice my immediate happiness or well-being in order to achieve future outcomes.

CFC_I1 Immediate: I only act to satisfy immediate concerns, figuring the future will take care of itself. (R)

CFC_I2 Immediate: My behavior is only influenced by the immediate (i.e., a matter of days or weeks) outcomes of my actions.
(R)

CFC_I3 Immediate: I only act to satisfy immediate concerns, figuring that I will take care of future problems that may occur
at a later date. (R)

ZTPI_1 Past negative: I think about the bad things that have happened to me in the past.

ZTPI_2 Past negative: I think about the good things that I have missed out on in my life.

GSC_C1 Creativity: I like to do strange things and rare things

GSC_C2 Creativity: I feel as though I have made a difference to many people.

GSC_C3 Creativity: When I think about things, I can think in unorthodox ways.

GSC_C4 Creativity: I have made and created things that have had an impact on other people.

GSC_C5 Creativity: I try to be creative in most things that I do.

GSC_A1 Altruism: If I see someone in trouble, I just want to help.

GSC_A2 Altruism: When I see a person who's unhappy, I comfort the person.

GSC_A3 Altruism: I often take care of others.

GSC_A4 Altruism: I do not volunteer to work for a charity.

GSC_A5 Altruism: I listen to what other people have to say.

GSC_G1 Generativity: I feel that I have done nothing that will survive after I die. (R)

GSC_G2 Generativity: I feel as though my contributions will exist after I die.

GSC_G3 Generativity: I feel as though I have done nothing of worth to contribute to others. (R)

GSC_G4 Generativity: I have made an effort to convey my way of life to young people.

GSC_G5 Generativity: I try to pass along the knowledge I have gained through my experiences.

GBC_1 I have celebrated services for my ancestors with my family or with relatives.

GBC_2 I have listened carefully to a child's opinions and discussed them.

GBC_3 I have visited a family grave.

GBC_4 I have offered financial help to children or elder parents.