Study Instructions Appendix

Failures of Contingent Reasoning in Annuitization Decisions

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1 Overview

In this appendix, we present screenshots of the experiment. The section organization follows the order in which screens were presented to participants. Section 2 shows the introductory screens of our experiment. Section 3 shows how the experiment was explained to participants, including an explanation of how the annuity worked and how to compute the bonus pay. It also includes detailed step-by-step examples of how to read the diagrams and how to compute the bonus pay. Section 4 presents seven comprehension questions. Section 5 presents examples of each type of decision that participants faced. Section 6 shows an example screen of how the bonus pay was computed and communicated to participants.

Given the richness of the experimental design, the screenshots focus on versions of the study that use the "annuity" wording and that had "regular" correlation between the marginal value of a token and the absolute payout. In the final section, we discuss alternative wordings and the Reverse-Correlation condition. In subsection 7.1, we show examples of the two alternative wordings, "Social Security" and "insurance," and discuss the main differences relative to the "annuity" wording. In subsection 7.2, we present examples of screens from the Reverse-Correlation condition, discussing the main changes relative to the other conditions.

2 Introduction

Participants were shown an introductory screen that gave them the expected duration of the study and informed them that participation was voluntary. It also provided them with contact information of one of the researchers.

Figure 1: Introduction

Hello,

We are researchers from Dartmouth College and UC Berkeley, and we study how people make decisions.

This study lasts approximately 15-20 minutes. Your participation is voluntary and you are not required to complete it. The information collected will be maintained anonymously.

Questions about this study may be directed to:
Professor Erzo Luttmer
Dartmouth College, HB6106
Hanover, NH 03755
Phone: 603-646-6479
Email: Luttmer@Dartmouth.edu.

Participants were then told how to convert their bonus pay from dollars to AmeriPoints, the unit in which they get paid in AmeriSpeak panel.

Figure 2: Dollar to AmeriPoint conversion

In this study, the bonus pay and all monetary values will be displayed in United States dollars.

Your final pay will be in AmeriPoints, according to the following conversion:

1 dollar = 1,000 AmeriPoints

3 Instructions and Examples

After the short introduction, the study began by explaining the type of choices participants would be asked to make and that the bonus pay would ultimately depend on the choices they made.

Figure 3: Instructions - Screen 1

Life Planning Game

In this study, you will play a Life Planning Game. The game has two stages: **stage 1** (when you're young) and **stage 2** (when you're old).

In the game, you **get tokens in stage 1** and you **may get additional tokens in stage 2**.

You will make choices about how many tokens from stage 1 you want to save for stage 2. You will also make choices about whether you want an annuity. We will explain later how an annuity works and why you may want to save from stage 1 for stage 2.

Figure 4: Instructions - Screen 2

The Goal of the Game

As we will explain below, the choices you make about savings and about an annuity affect how many tokens you end up with in stage 1 and how many you end up with in stage 2.

The bonus pay for stage 1 depends on the tokens you end up with in stage 1. Similarly, the bonus pay for stage 2 depends on the tokens you end up with in stage 2. We will explain later how exactly the bonus pay depends on the tokens.

By making better choices about savings and the annuity, you can get a higher bonus pay for stages 1 and 2 combined.

Figure 5: Instructions - Screen 3

How the annuity works

What happens during stage 2 (when you're old) depends on chance.

In stage 2, one of two possible outcomes can happen, each equally likely (like a coin toss):

- You survive in stage 2
- You do not survive in stage 2

When you have an annuity, you get tokens from the annuity in stage 2 only if you survive. If you don't survive, you don't get any tokens from the annuity.

Figure 6: Instructions - Screen 4

How tokens in a stage determine the bonus pay for that stage

You **must** make sure that you end up with at least 40 tokens for each stage when you are alive. Think of these 40 tokens as what you need to stay alive.

This means that you **must** choose your savings and annuity such that you end up with at least 40 tokens in each stage when you are alive. The computer will not allow you to continue if you make a savings decision that gives you fewer than 40 tokens in either stage when you are alive.

Bonus pay in each stage:

- You **do not** get any bonus pay for the **first 40 tokens** in a stage.
- You get **$0.25 for each token between 41 and 80** in a stage.
- You get $10.00 if you end up with **80 tokens or more**. You do **not** get more bonus pay for tokens beyond 80 in a stage.

For example, you get $0 if you have 40 tokens, $0.25 if you have 41 tokens, $0.50 if you have 42 tokens, $2.50 if you have 50 tokens, $10.00 if you have 80 tokens, and $10.00 if you have 100 tokens in a stage.

We first calculate your bonus pay for stage 1 based on the tokens you end up with in stage 1. Next, we calculate your bonus pay for stage 2 based on the tokens you end up with in stage 2. Finally, we add the bonus pay for stage 1 and 2 together.

These rules are always the same, and we will remind you of them with a diagram:

Reminder: Bonus pay in each stage

First 40 tokens	**$0 for each token** You **must** end up with at least 40 tokens in each stage when you're alive
Tokens 41 to 80	**$0.25 for each token** You get $0.25 for 41 tokens, $0.50 for 42 tokens etc.
Tokens above 80	**$0 for each token over 80** You get $10.00 if you have 80 tokens or more

After the four screens with instructions, participants were presented with two examples, where they were guided through a step-by-step explanation of the diagrams and the game.

Figure 7: Example 1 - Screen 1

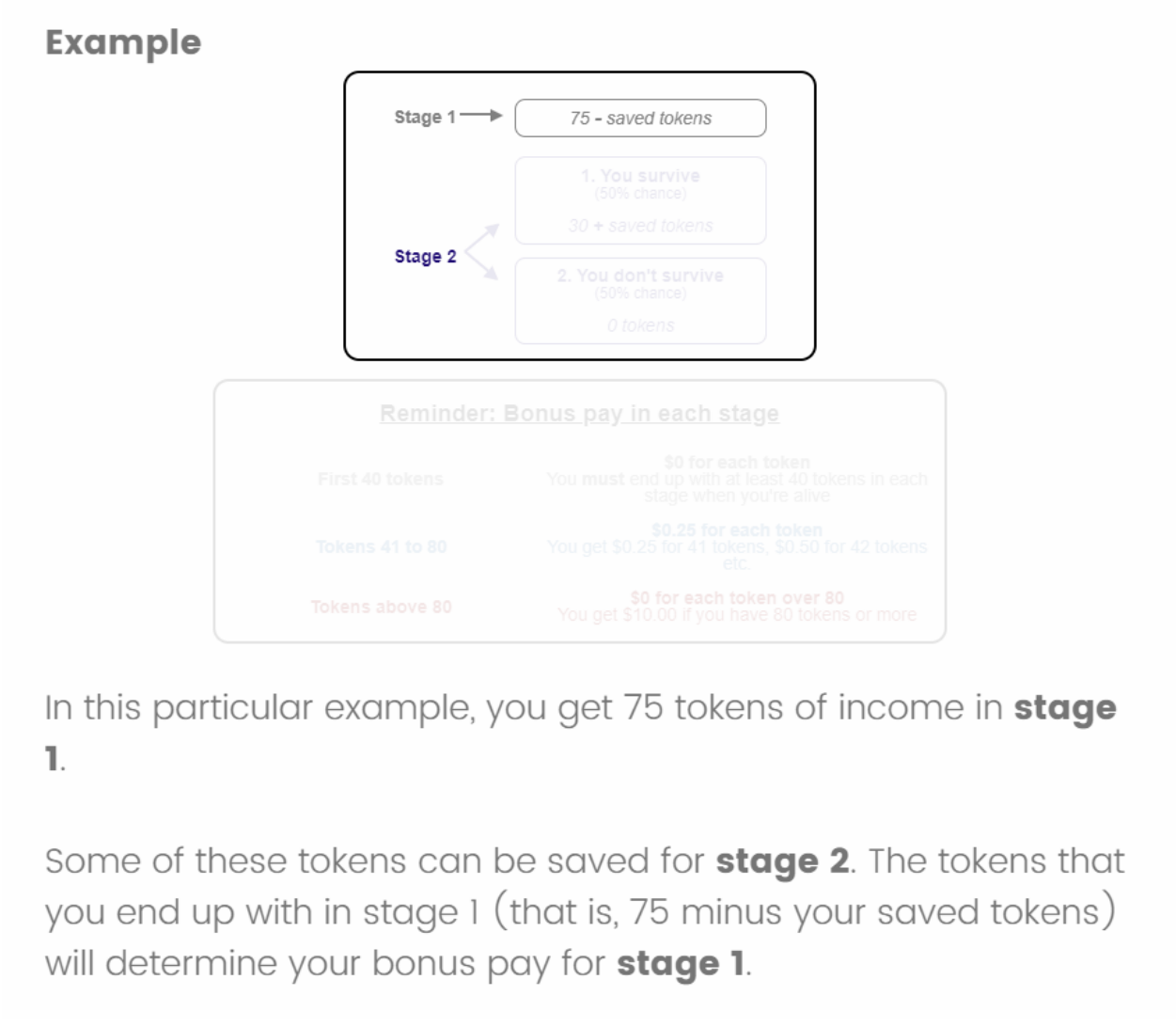
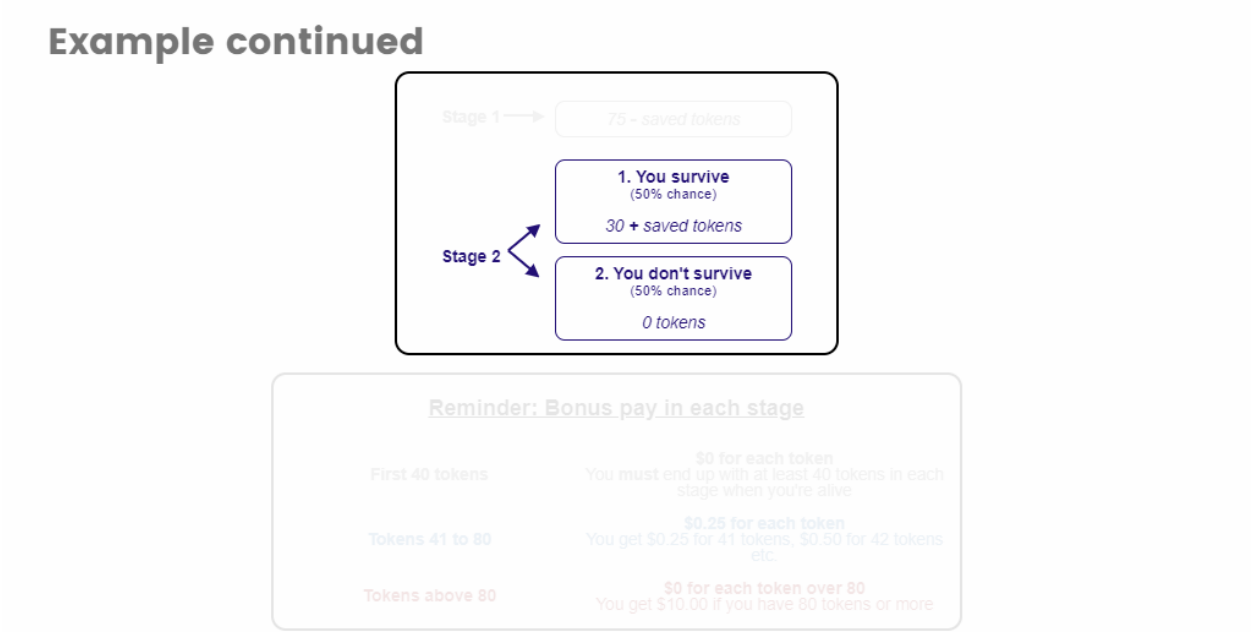


Figure 8: Example 1 - Screen 2



In this particular example, you have an annuity (you won't have one in all of your decisions). You get 30 tokens from the annuity only if you survive in stage 2 of the game. If you don't survive in stage 2, you get no tokens from the annuity in stage 2.

In **stage 2**, one of two possible outcomes can happen, each equally likely (like a coin toss):

1. **You survive in stage 2**: You get 30 tokens from your annuity and the tokens you saved from stage 1 for stage 2. These tokens determine your bonus pay for stage 2.
2. **You do not survive in stage 2:** You get 0 tokens. You get no bonus pay for stage 2.

Because you need to end up with at least **40** tokens in stage 2 when you survive, you **must save at least 10 tokens** to make up the difference between the **40** tokens you need in stage 2 and the 30 tokens you get from the annuity if you survive in stage 2.

A second example was then presented, focusing on the bonus pay computation.

Figure 9: Example 2 - Screen 3

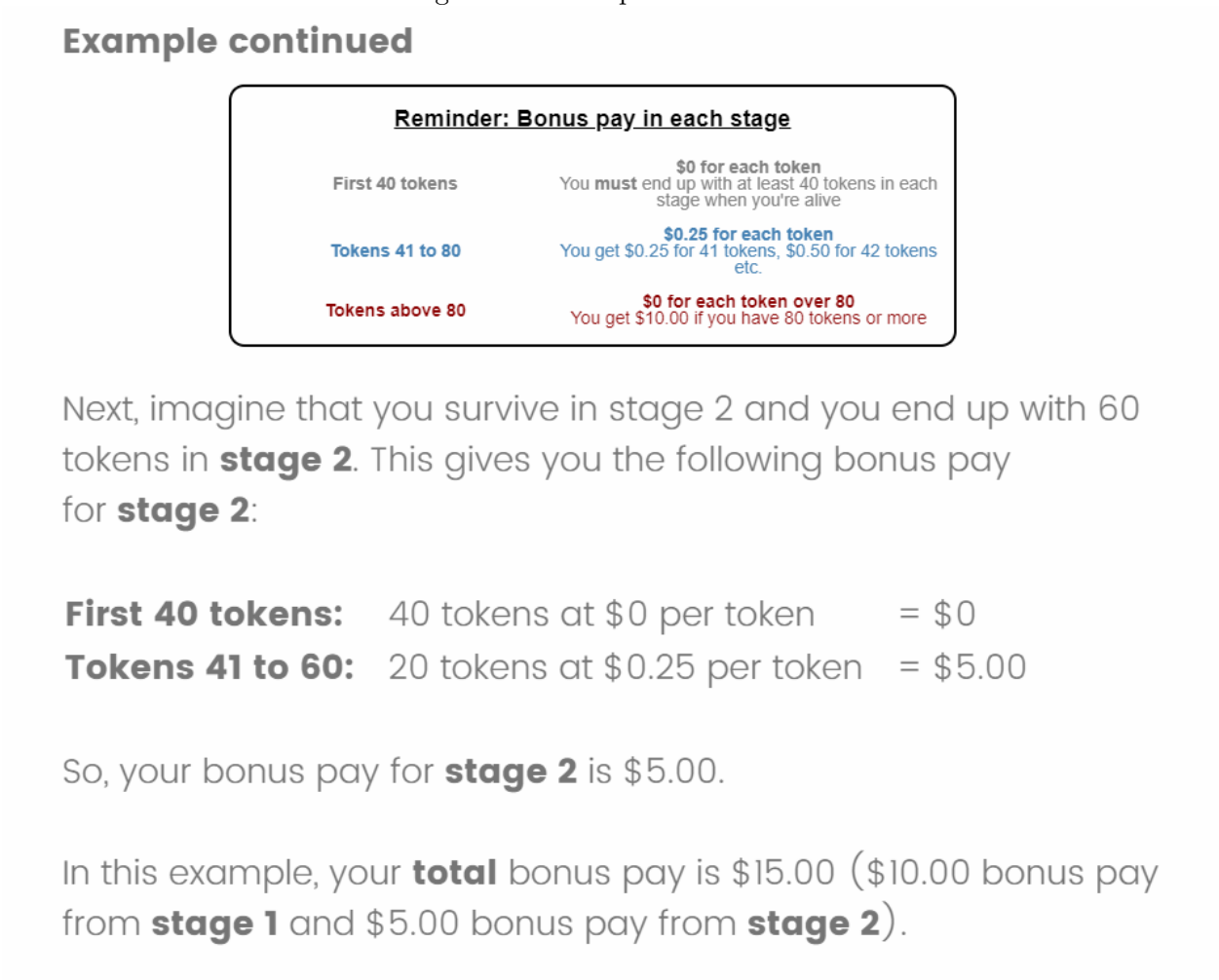
Let's now do a **new** example with a **different** number of tokens. This example shows how your bonus pay is determined in each stage.

Reminder: Bonus pay in each stage

First 40 tokens	**$0 for each token** You **must** end up with at least 40 tokens in each stage when you're alive
Tokens 41 to 80	**$0.25 for each token** You get $0.25 for 41 tokens, $0.50 for 42 tokens etc.
Tokens above 80	**$0 for each token over 80** You get $10.00 if you have 80 tokens or more

Imagine that you end up with 105 tokens in **stage 1**. Because you end up with more than 80 tokens in stage 1, your bonus pay for stage 1 is $10.00.

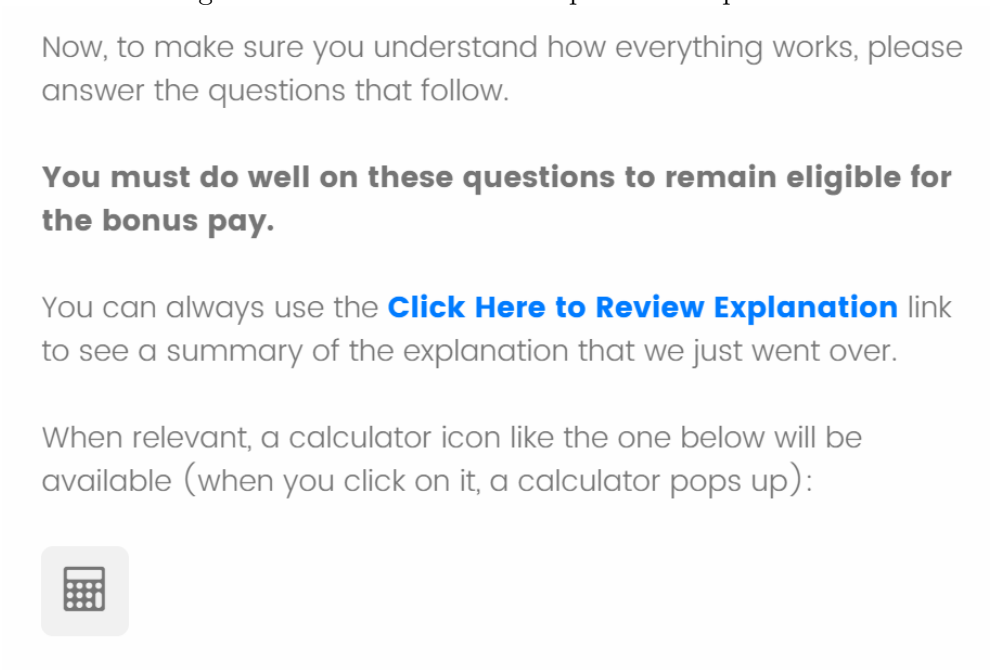
Figure 10: Example 2 - Screen 2



4 Comprehension questions

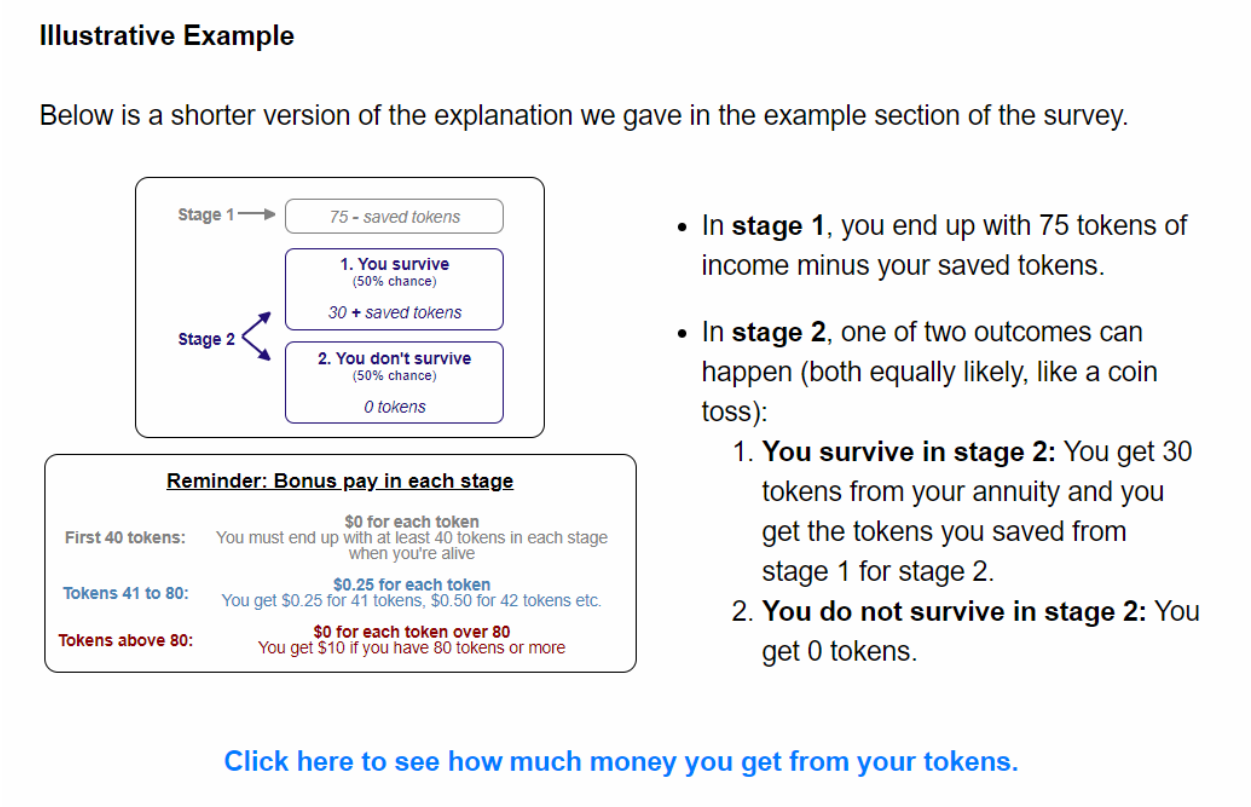
After the examples, participants faced seven comprehension questions. They were also told that doing well on these questions was a condition to be eligible for the bonus pay, and that they could always see a concise version of the explanation of the diagram and of the bonus pay computation by clicking on a link.

Figure 11: Introduction to comprehension questions



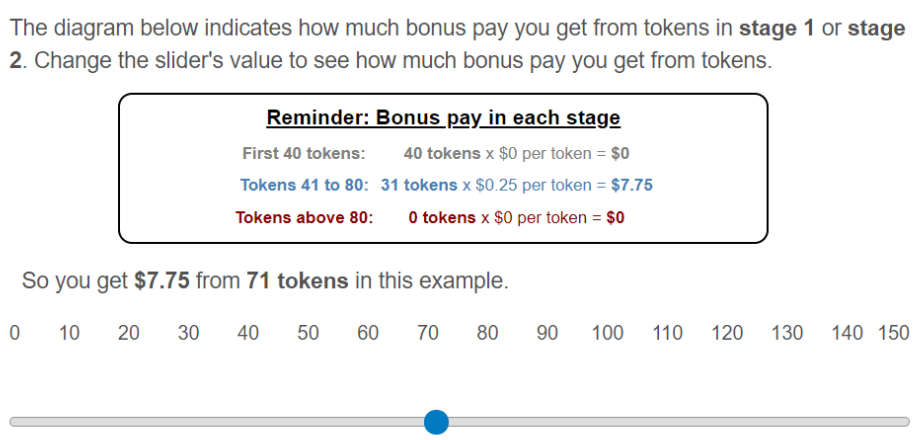
If participants clicked on the link "Click Here to Review Explanation," the following screen opened in a new tab of their browser window:

Figure 12: Concise explanation



If participants clicked on the link "Click here to see how much money you get from your tokens," the following screen opened in a new tab of their browser window:

Figure 13: Concise explanation - Bonus



In comprehension questions 1-6, participants were shown an additional screen if they chose an incorrect answer. This screen told them that their answer was incorrect. It also explained what

the correct answer was and, if applicable, why. In comprehension questions 2-6, this explanation was immediately followed by a retake of the same question that was answered incorrectly, but with the order of the alternatives re-randomized.

Figure 14: Comprehension question 1

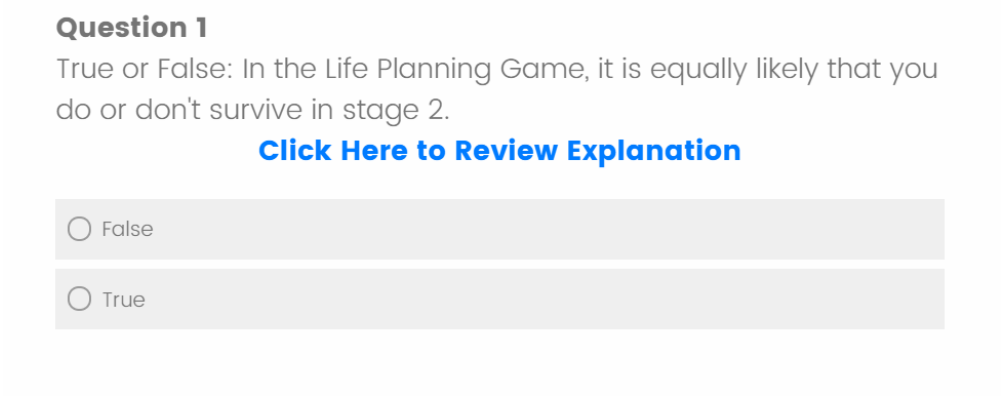


Figure 15: Explanation of the correct answer to comprehension question 1 (shown if answered incorrectly)

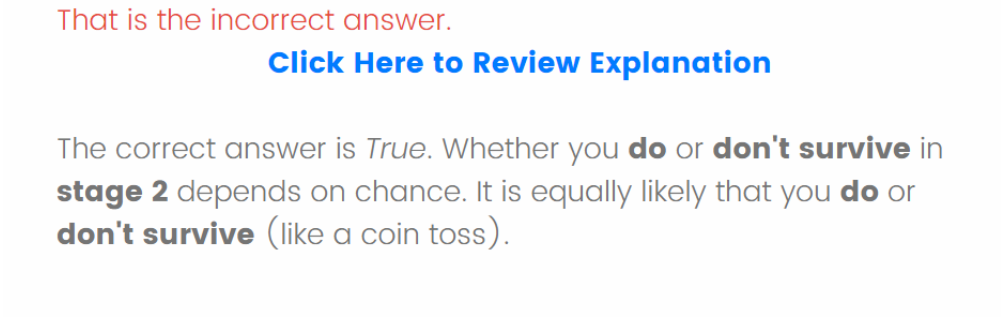
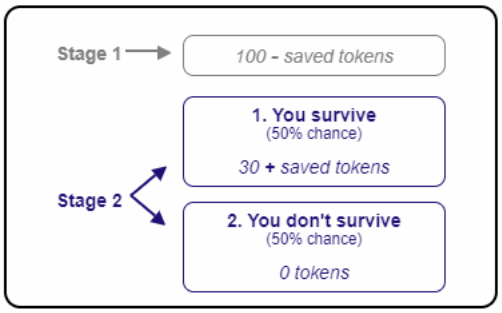


Figure 16: Comprehension question 2

Question 2

Imagine you get 100 tokens of income in stage 1. You can save some of these tokens. You have an annuity. If you survive in stage 2, you get 30 tokens from the annuity plus your saved tokens in stage 2. If you do not survive in stage 2, you get 0 tokens in stage 2.



Click Here to Review Explanation

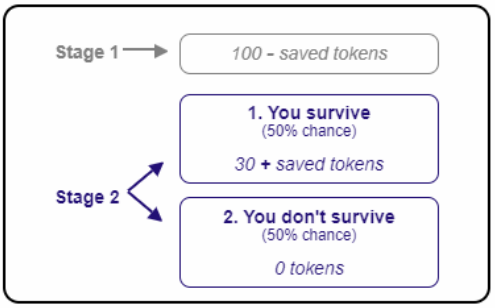
What is the lowest number of tokens that you **must** save from stage 1 for stage 2?

*Hint: Remember, you must end up with **at least 40 tokens** in each stage when you are alive.*

- ◯ 0 tokens (because 30 + 0 = **30** tokens if you survive in stage 2)
- ◯ 5 tokens (because 30 + 5 = **35** tokens if you survive in stage 2)
- ◯ 10 tokens (because 30 + 10 = **40** tokens if you survive in stage 2)
- ◯ 15 tokens (because 30 + 15 = **45** tokens if you survive in stage 2)

Figure 17: Explanation of the correct answer to comprehension question 2 (shown if answered incorrectly)

That is the incorrect answer.



Click Here to Review Explanation

The correct answer is *10 tokens*, because you must end up with at least **40** tokens in each stage when you are alive, and 30 + 10 = **40**.

Because you get 30 tokens from the annuity if you survive in stage 2, your savings must make up the difference between 30 and **40**.

Figure 18: Comprehension question 3

Question 3

Reminder: Bonus pay in each stage

First 40 tokens	**$0 for each token** You **must** end up with at least 40 tokens in each stage when you're alive
Tokens 41 to 80	**$0.25 for each token** You get $0.25 for 41 tokens, $0.50 for 42 tokens etc.
Tokens above 80	**$0 for each token over 80** You get $10.00 if you have 80 tokens or more

Click Here to Review Explanation

Imagine you end up with 60 tokens in stage 1 and 50 tokens in stage 2. If you got 10 extra tokens in **stage 1** (so 70 instead of 60 tokens), how much additional bonus pay would you get from these 10 extra tokens?

- ○ $0
- ○ $0.25
- ○ $2.50
- ○ $17.50

Figure 19: Explanation of the correct answer to comprehension question 3 (shown if answered incorrectly)

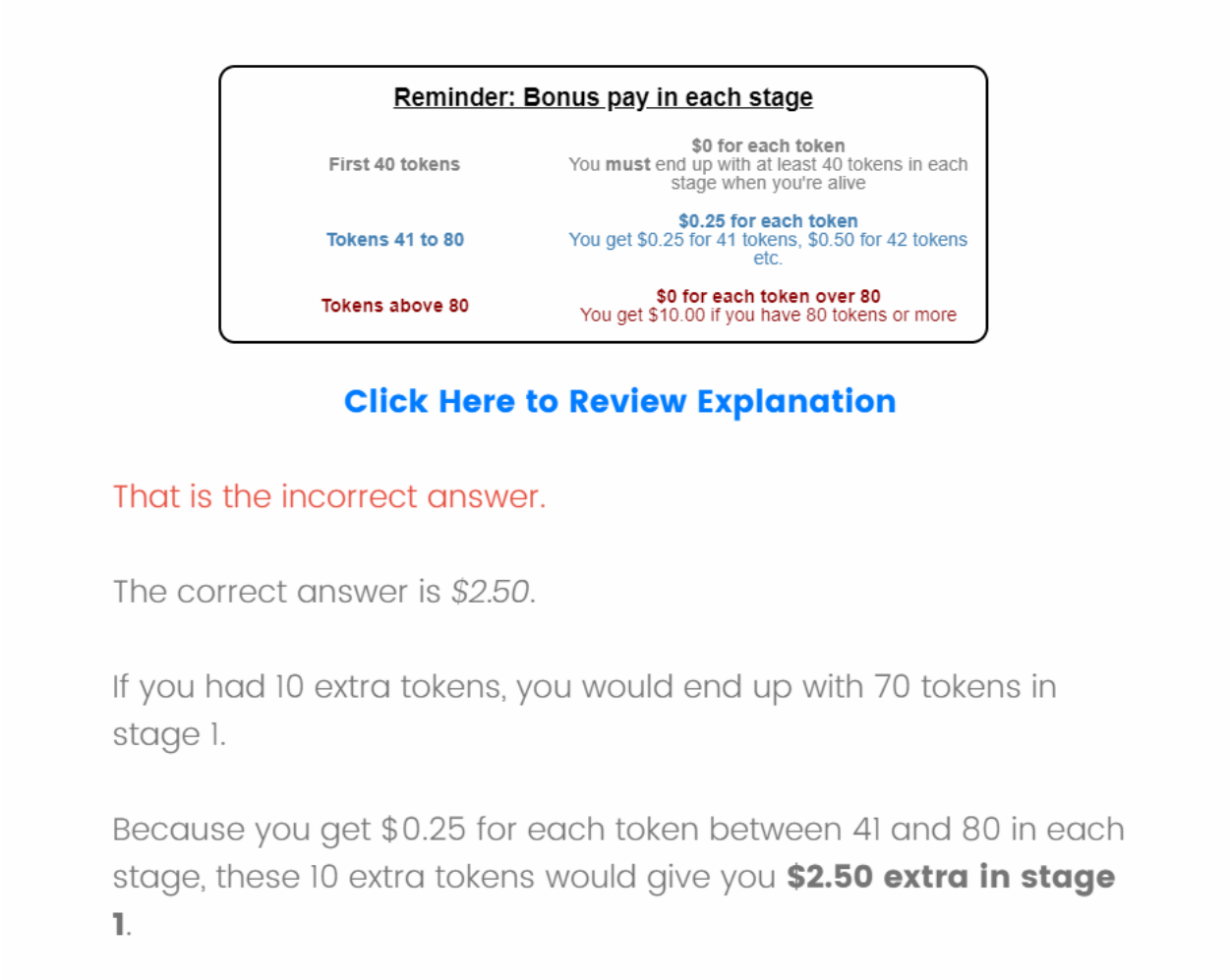


Figure 20: Comprehension question 4

Question 4

Reminder: Bonus pay in each stage

First 40 tokens	**$0 for each token** You **must** end up with at least 40 tokens in each stage when you're alive
Tokens 41 to 80	**$0.25 for each token** You get $0.25 for 41 tokens, $0.50 for 42 tokens etc.
Tokens above 80	**$0 for each token over 80** You get $10.00 if you have 80 tokens or more

Click Here to Review Explanation

Imagine you end up with 50 tokens in stage 1 and 90 tokens in stage 2. If you got 10 extra tokens in **stage 2** (so 100 instead of 90 tokens), how much additional bonus pay would you get from these 10 extra tokens?

- ○ $0
- ○ $0.25
- ○ $2.50
- ○ $25.00

Figure 21: Explanation of the correct answer to comprehension question 4 (shown if answered incorrectly)

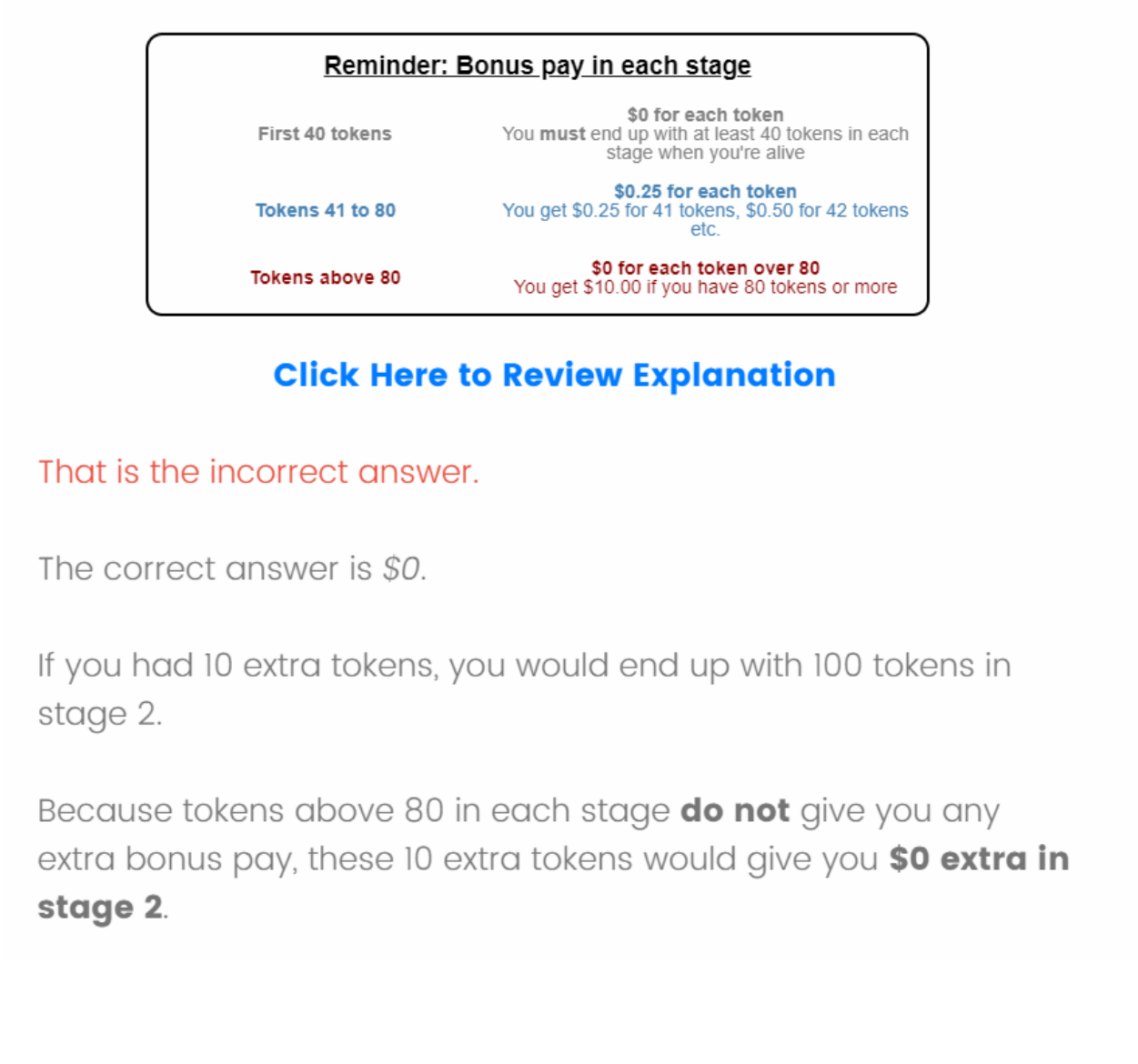


Figure 22: Comprehension question 5

Question 5

Reminder: Bonus pay in each stage

First 40 tokens	**$0 for each token** You **must** end up with at least 40 tokens in each stage when you're alive
Tokens 41 to 80	**$0.25 for each token** You get $0.25 for 41 tokens, $0.50 for 42 tokens etc.
Tokens above 80	**$0 for each token over 80** You get $10.00 if you have 80 tokens or more

Click Here to Review Explanation

If you end up with 100 tokens in **stage 1** and with 50 tokens in **stage 2**, what is your **total bonus pay** from both stages of the Life Planning Game?

- ◯ **In total:** More than 80 tokens = **$10.00**
- ◯ Stage 1: More than 80 tokens = $10.00
  Stage 2: 10 tokens above 40 = $2.50
  In total: **$12.50**
- ◯ Stage 1: 60 tokens above 40 = $15.00
  Stage 2: 50 tokens = $12.50
  In total: **$27.50**
- ◯ **In total:** 150 tokens = **$37.50**

Figure 23: Explanation of the correct answer to comprehension question 5 (shown if answered incorrectly)

That is the incorrect answer.

The correct answer is:
Stage 1: More than 80 tokens = $10.00
Stage 2: 10 tokens above 40 = $2.50
In total: $12.50

If you end up with 100 tokens in **stage 1**, then

- The first 40 tokens give you $0.
- Tokens 41 to 80 give you $0.25 each.
- Tokens above 80 give you $0 extra.

So, you get $10.00 in **stage 1**.

If you end up with 50 tokens in **stage 2**, then

- The first 40 tokens give you $0.
- Tokens 41 to 80 give you $0.25 each, so you get $0.25 from each token from 41 to 50.

So, you get 40 x $0 + 10 x $0.25 = $2.50 in **stage 2**.

And you get $10.00 from **stage 1** + $2.50 from **stage 2** = $12.50 **in total**.

Figure 24: Comprehension question 6

Question 6

Reminder: Bonus pay in each stage

First 40 tokens	**$0 for each token** You **must** end up with at least 40 tokens in each stage when you're alive
Tokens 41 to 80	**$0.25 for each token** You get $0.25 for 41 tokens, $0.50 for 42 tokens etc.
Tokens above 80	**$0 for each token over 80** You get $10.00 if you have 80 tokens or more

Click Here to Review Explanation

Imagine you end up with 70 tokens in **stage 1** after you have saved 60 tokens for **stage 2**.

If you don't survive in stage 2, what is your **total bonus pay** from both stages of the Life Planning Game?

- ◯ Stage 1: 30 tokens above 40 = $7.50
  Stage 2: 20 tokens above 40 = $5.00
  In total: $12.50
- ◯ Stage 1: 30 tokens above 40 = $7.50
  Stage 2: 0 tokens = $0.00
  In total: $7.50
- ◯ **In total:** 130 tokens = **$32.50**
- ◯ **In total:** More than 80 tokens = **$10.00**

Figure 25: Explanation of the correct answer to comprehension question 6 (shown if answered incorrectly)

That is the incorrect answer.

The correct answer is:
Stage 1: 30 tokens above 40 = $7.50
Stage 2: 0 tokens = $0
In total: $7.50

If you end up with 70 tokens in **stage 1**, then

- The first 40 tokens give you $0.
- Tokens 41 to 80 give you $0.25 each, so you get $0.25 from each token from 41 to 70.

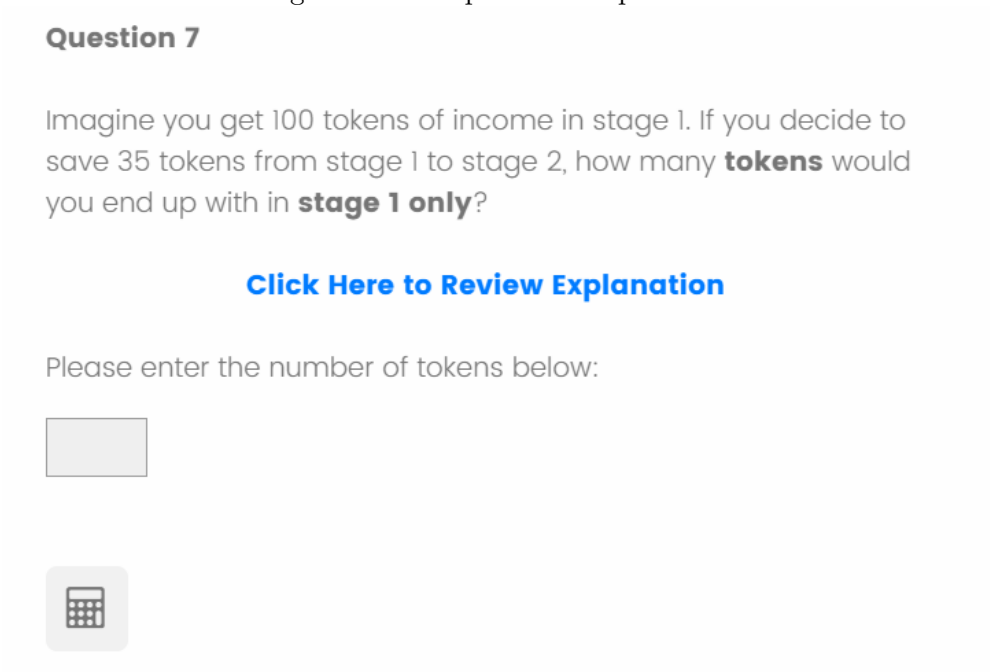
So, you get 40 x $0 + 30 x $0.25 = $7.50 in **stage 1**.

Because you do not survive in stage 2, you do not get any tokens in that stage.

So, you get $0 in **stage 2**.

In total, you get $7.50 from **stage 1** + $0 from **stage 2** = $7.50.

Figure 26: Comprehension question 7



5 Annuity and savings decisions

Participants who passed the comprehension questions were then guided to the savings and annuity decisions. Participants faced a block of three savings decisions, a block with two annuity decisions, and a block with one annuity decision. The order of these three blocks was determined by our experimental design, as described in Section 2 of the paper. After collecting data on 1,049 of the 3,038 participants, we added a fourth block with one annuity decision. This block was always asked last. Participants thus faced a total of 3 savings decisions and 3 or 4 annuity decisions.

Before being asked to make annuity or savings decisions, participants were given information on the types of choices they would be presented with and that one of these choices would be randomly selected for payout.

Figure 27: Introduction to decisions (screen 1)

You will play 7 different versions of the Life Planning Game. Sometimes you get to choose whether or not to have an annuity, sometimes you get to choose how many tokens from stage 1 you want to save for stage 2, and sometimes you get to choose how to allocate tokens between stage 1 and stage 2.

At the end of this study, the computer will randomly select one of these 7 Life Planning Games. You will receive the bonus pay for the Life Planning Game chosen by the computer.

If the number of saved tokens is not specified in the Life Planning Game selected by the computer, we will determine the bonus pay for that game using the number of tokens you chose to save in a different Life Planning game that had the same income in stage 1 and the same annuity.

Any Life Planning Game could be selected for determining the bonus pay, so it is important that you respond carefully and honestly in each game.

Figure 28: Introduction to decisions (screen 2)

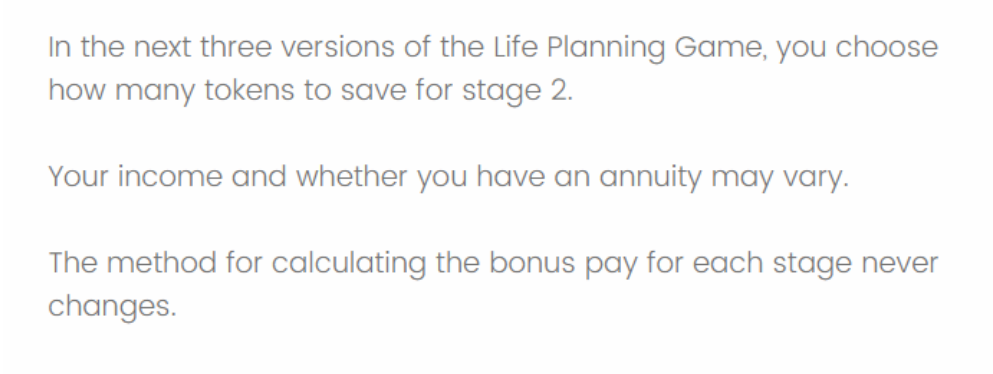
You will now play 7 versions of the Life Planning Game.

The method for calculating the bonus pay for each stage never changes.

5.1 Savings decisions

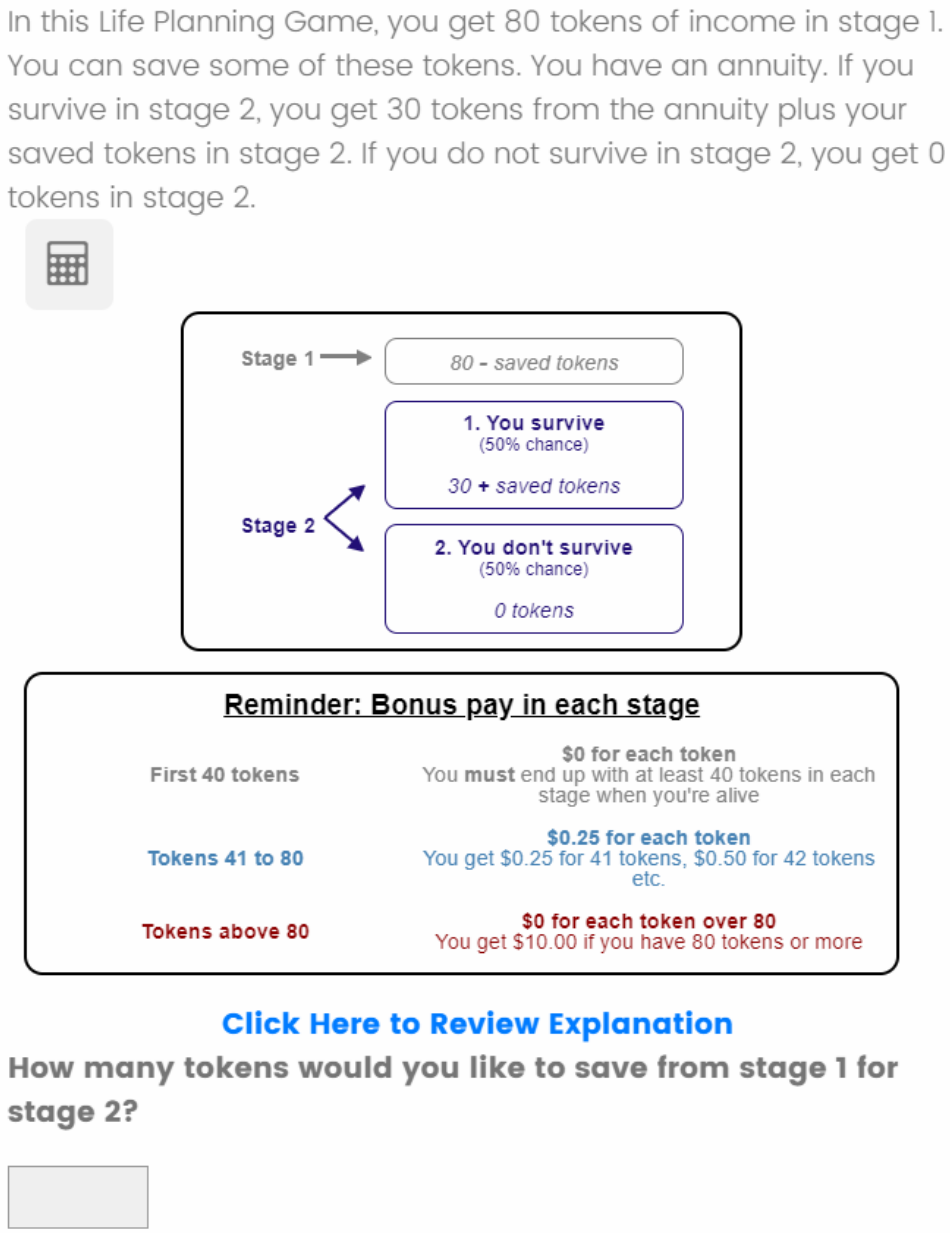
Before presenting the block with three savings decision, there was an introductory text specific to these decisions.

Figure 29: Introduction to savings decisions



Each participant had to make three savings decisions, similar to the one below. The token amounts shown in these decisions varied according to our experimental decisions. Participants had to type their chosen level of savings in the box.

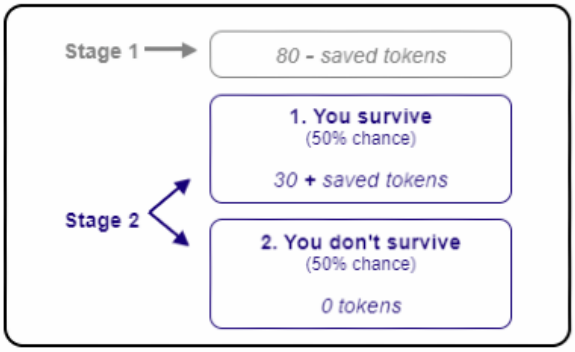
Figure 30: Example of a savings decision



If participants typed a level of savings that resulted in them having fewer than 40 tokens in stage 1 or stage 2, they were presented with the exact same question in the next screen, but with a red text added explaining the bounds of the level of savings they could choose from.

Figure 31: Message explaining savings range

In this Life Planning Game, you get 80 tokens of income in stage 1. You can save some of these tokens. You have an annuity. If you survive in stage 2, you get 30 tokens from the annuity plus your saved tokens in stage 2. If you do not survive in stage 2, you get 0 tokens in stage 2.



Reminder: Bonus pay in each stage

First 40 tokens	**$0 for each token** You **must** end up with at least 40 tokens in each stage when you're alive
Tokens 41 to 80	**$0.25 for each token** You get $0.25 for 41 tokens, $0.50 for 42 tokens etc.
Tokens above 80	**$0 for each token over 80** You get $10.00 if you have 80 tokens or more

Click Here to Review Explanation

How many tokens would you like to save from stage 1 for stage 2?

Please save at least 10 tokens (so you have at least 40 tokens to satisfy the minimum required for stage 2) and at most 40 tokens (so you keep at least 40 tokens to satisfy the minimum required for stage 1).

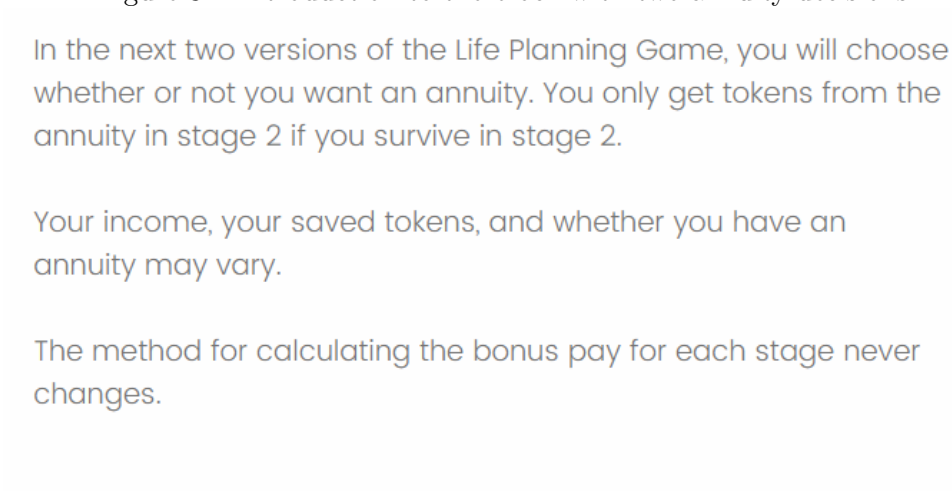
5.2 Annuity decisions

5.2.1 Block with two annuity decisions (Benchmark condition, No-Status-Quo condition, or Salient Contingencies I condition)

The block with two annuity decisions always showed two annuity decisions that were of the same experimental condition but differ in price: one involving a low price (better than actuarially fair) and one with a high price (worse than actuarially fair) annuity. The experimental condition could be the Benchmark condition, the No-Status-Quo condition, or the Salient Contingencies I condition.

The following introductory text was displayed before the block with two annuity decisions:

Figure 32: Introduction to the block with two annuity decisions



Annuity decisions in the Benchmark condition had two screens, as shown below. In the first one, participants were shown what they had. Only in the second screen they were asked if they would like to buy an annuity. In this second screen, the price of the annuity was either 10 (low price) or 20 (high price).

Figure 33: Benchmark annuity decision - Screen 1

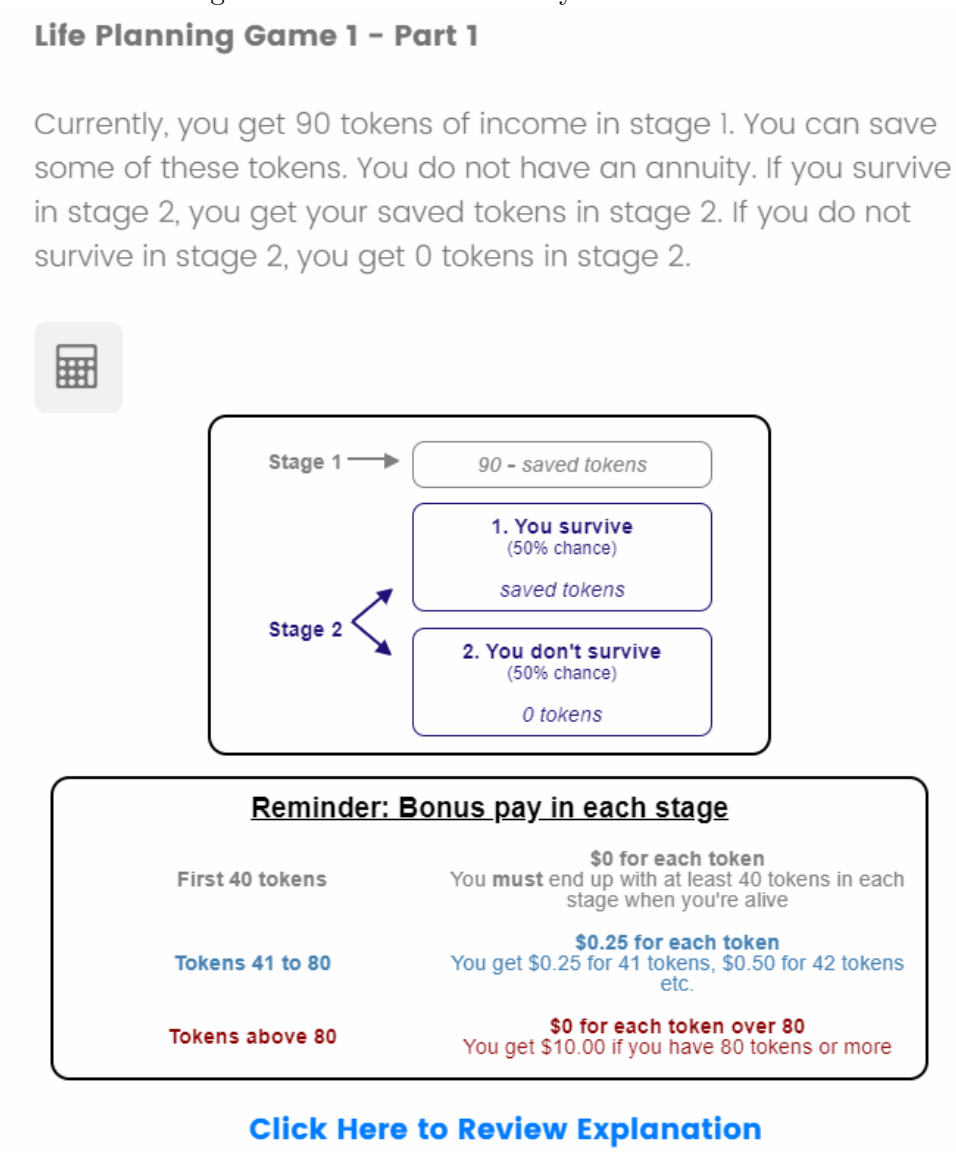
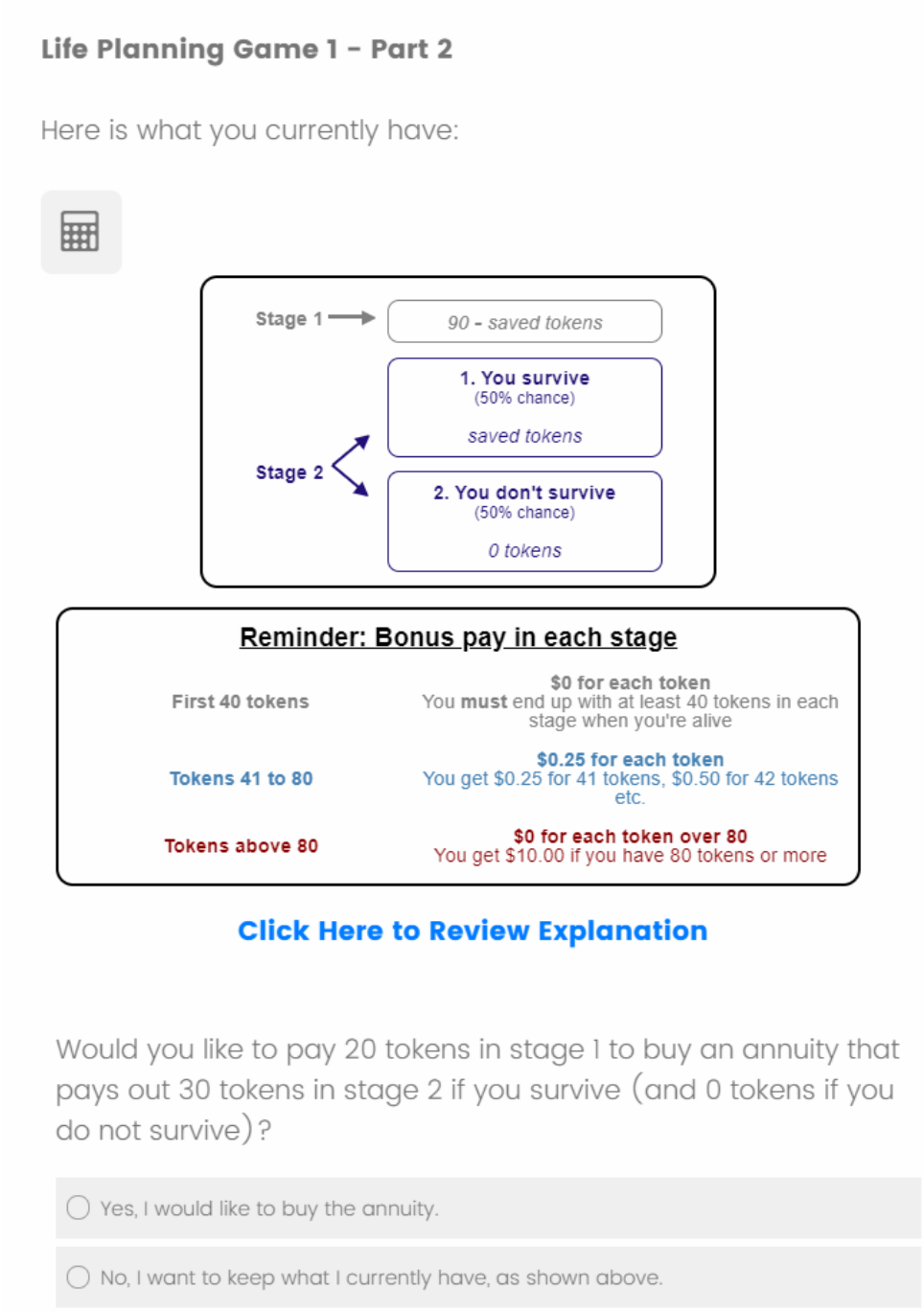


Figure 34: Benchmark annuity decision - Screen 2



In the No-Status-Quo condition and in the Salient Contingencies I condition, annuity decisions did not have a status quo but the options with and without an annuity were instead displayed side-by-side. Both conditions resulted in an annuity question that looks identical because the only difference between them is whether they were asked before the block with savings decisions (the No-Status-Quo condition) or after it (the Salient Contingencies I condition). In both conditions,

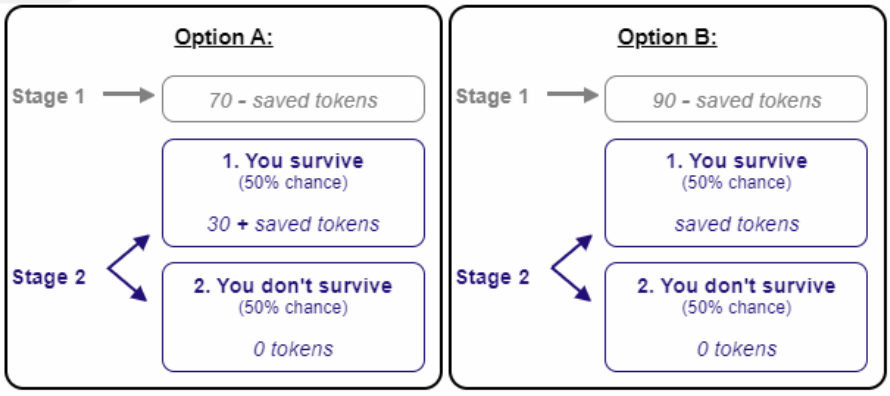
decisions were displayed in a single screen. An example of these conditions is shown below. The exact screen shown varied based on whether the annuity price was high or low, and whether the annuity was shown in option A or option B.

Figure 35: Annuity decision - No-Status-Quo condition or Salient Contingencies I condition

Life Planning Game 1

In Option A, you get 70 tokens of income in stage 1. You can save some of these tokens. You have an annuity. If you survive in stage 2, you get 30 tokens from the annuity plus your saved tokens in stage 2. If you do not survive in stage 2, you get 0 tokens in stage 2.

In Option B, you get 90 tokens of income in stage 1. You can save some of these tokens. You do not have an annuity. If you survive in stage 2, you get your saved tokens in stage 2. If you do not survive in stage 2, you get 0 tokens in stage 2.



Reminder: Bonus pay in each stage

First 40 tokens	**$0 for each token** You **must** end up with at least 40 tokens in each stage when you're alive
Tokens 41 to 80	**$0.25 for each token** You get $0.25 for 41 tokens, $0.50 for 42 tokens etc.
Tokens above 80	**$0 for each token over 80** You get $10.00 if you have 80 tokens or more

Click Here to Review Explanation

Please choose one of the two options shown above:

- ◯ Option A
- ◯ Option B

5.2.2 Block with single annuity decision (Salient Contingencies II, III or IV condition)

An introductory text was displayed before the block with the single annuity decisions. Since this decision could either have context (Salient Contingencies II) or not (Salient Contingencies III or IV), we present both versions.

Figure 36: Introduction to the block with a single annuity decision - With context

In the next version of the Life Planning Game, you will choose whether or not you want an annuity. You only get tokens from the annuity in stage 2 if you survive in stage 2.

Your income, your saved tokens, and whether you have an annuity may vary.

The method for calculating the bonus pay for each stage never changes.

Figure 37: Introduction to the block with a single annuity decision - Without context

In the next version of the Life Planning Game, you will choose between two alternatives that differ in the tokens you get in stage 1 and in stage 2.

The method for calculating the bonus pay for each stage never changes.

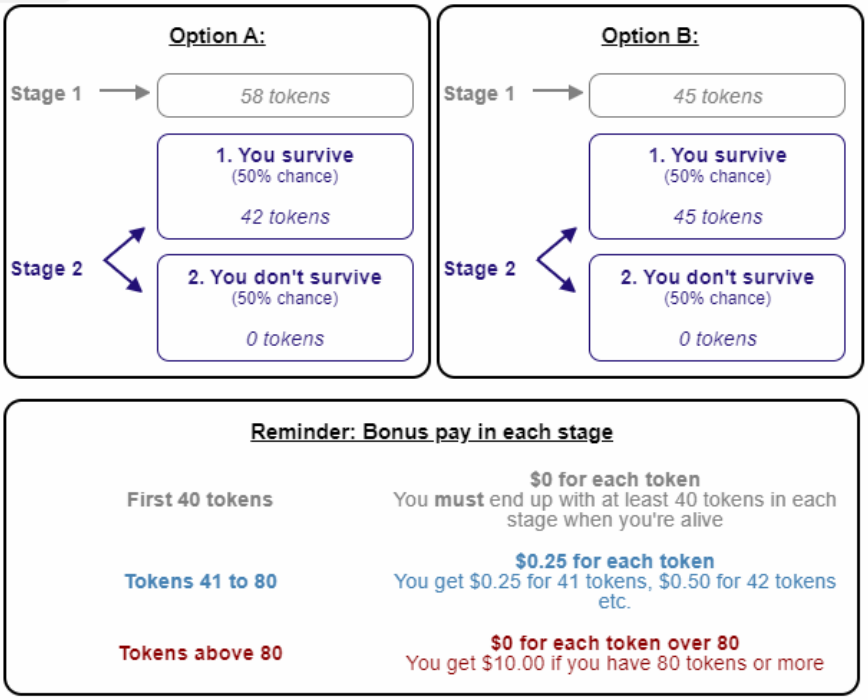
All Salient Contingencies annuity decisions were presented without a status quo: the annuity and the no annuity options were shown side-by-side. Below, we show examples of each type of salient contingency decisions. The exact screen shown varied based on whether the annuity price was high or low, and whether the annuity was shown in option A or option B.

Figure 38: Annuity decision - Salient Contingencies II

Life Planning Game 6

In Option A, you get 70 tokens of income in stage 1. You must save exactly 12 of these tokens. You have an annuity. If you survive in stage 2, you get 30 tokens from the annuity plus your 12 saved tokens in stage 2. If you do not survive in stage 2, you get 0 tokens in stage 2. The resulting tokens are shown in the diagram below.

In Option B, you get 90 tokens of income in stage 1. You must save exactly 45 of these tokens. You do not have an annuity. If you survive in stage 2, you get your 45 saved tokens in stage 2. If you do not survive in stage 2, you get 0 tokens in stage 2. The resulting tokens are shown in the diagram below.



Click Here to Review Explanation

Please choose one of the two options shown above:

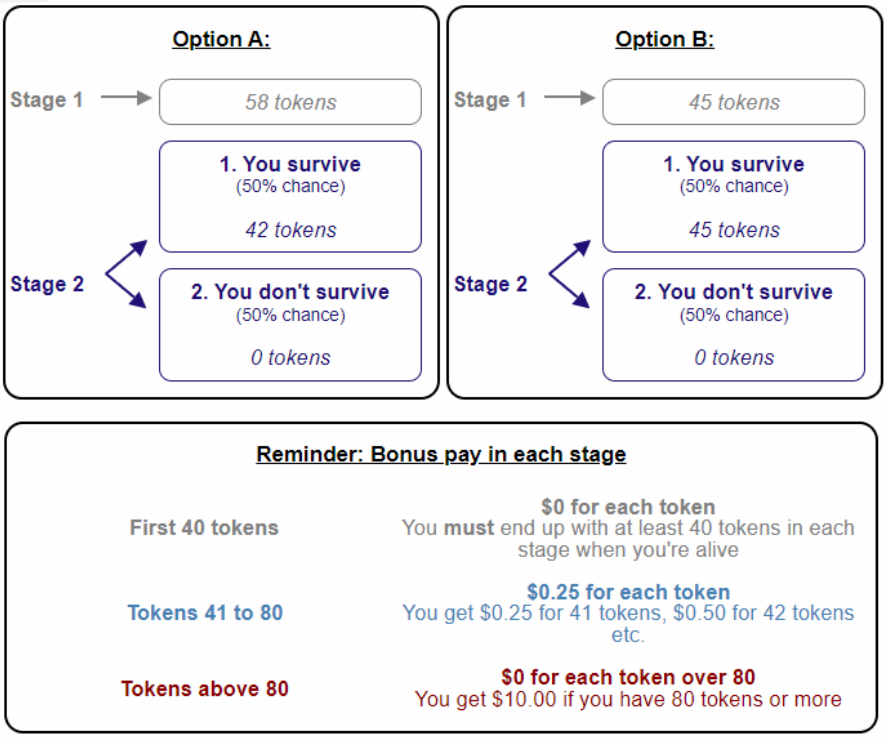
- ◯ Option A
- ◯ Option B

Figure 39: Annuity decision - Salient Contingencies III

Life Planning Game 6

In Option A, you get 58 tokens in stage 1. You cannot save any of these tokens. If you survive in stage 2, you get 42 tokens in stage 2. If you do not survive in stage 2, you get 0 tokens in stage 2.

In Option B, you get 45 tokens in stage 1. You cannot save any of these tokens. If you survive in stage 2, you get 45 tokens in stage 2. If you do not survive in stage 2, you get 0 tokens in stage 2.

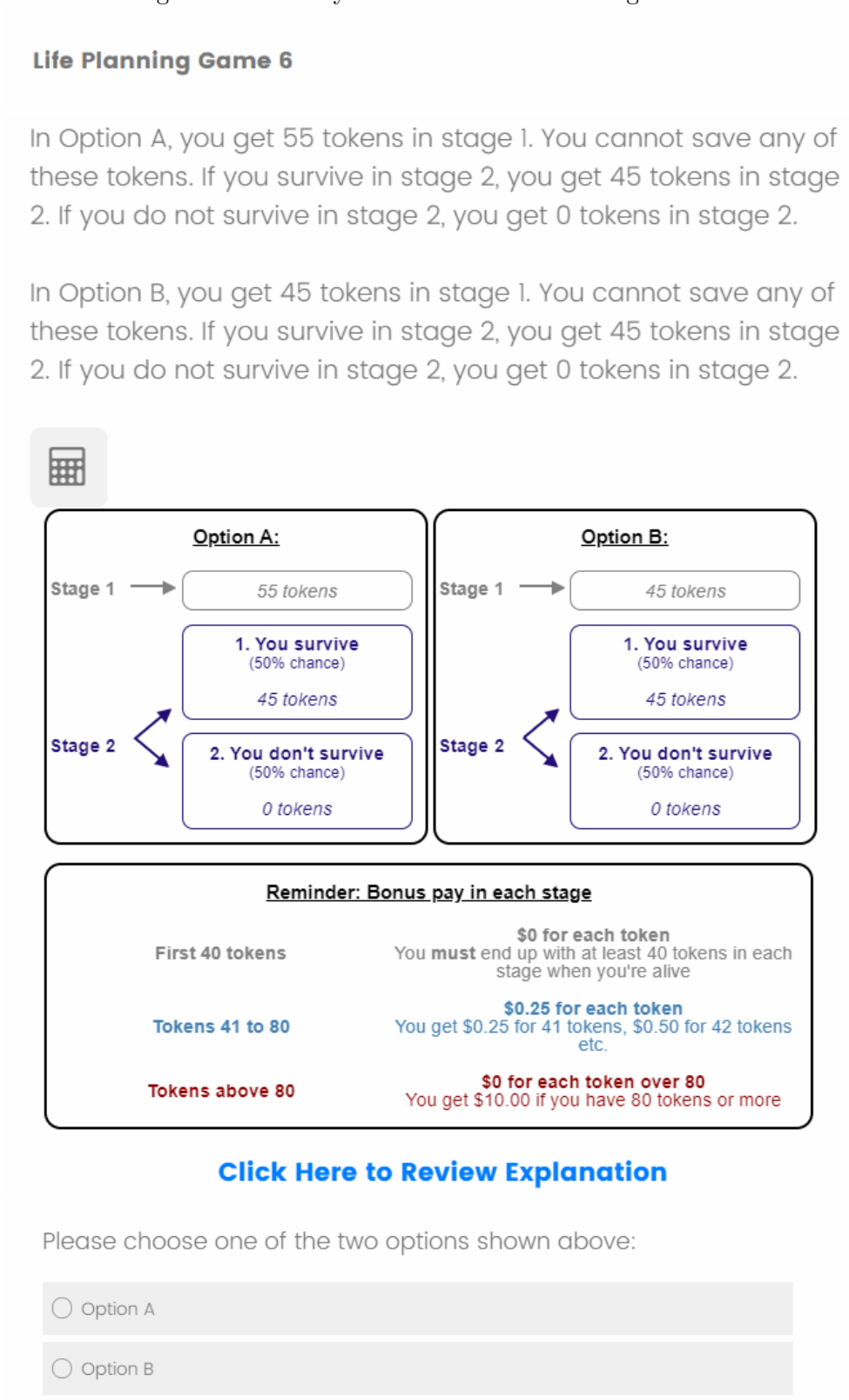


Click Here to Review Explanation

Please choose one of the two options shown above:

- ◯ Option A
- ◯ Option B

Figure 40: Annuity decision - Salient Contingencies IV



6 Bonus pay

After making all of the savings and annuity decisions, participants were shown which decision was selected for payout and how their bonus pay was calculated.

Figure 41: Introduction - Bonus pay

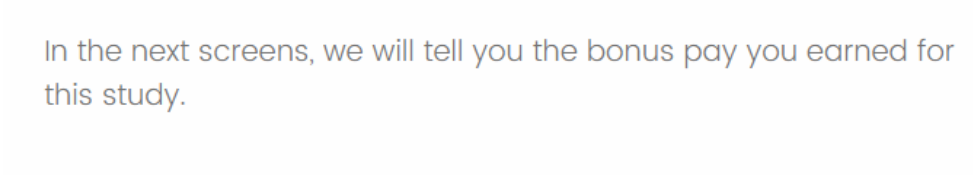
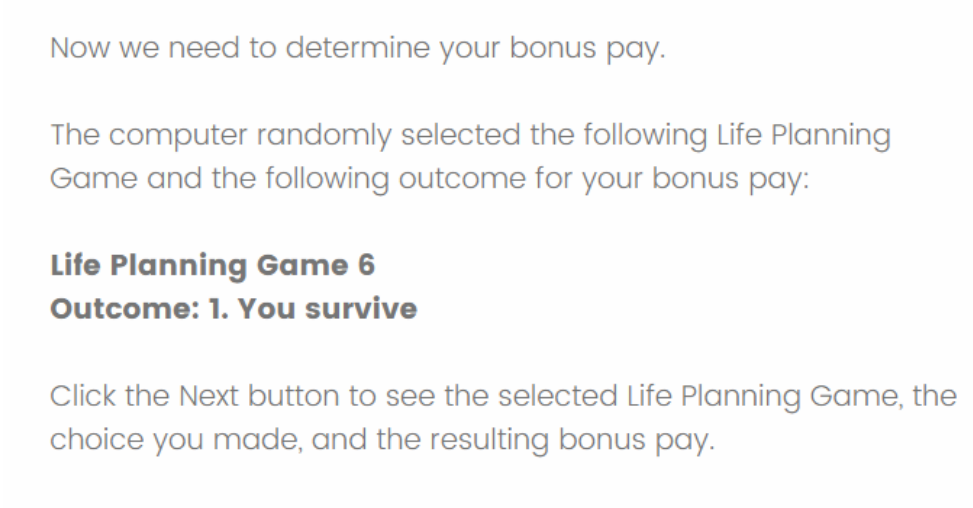
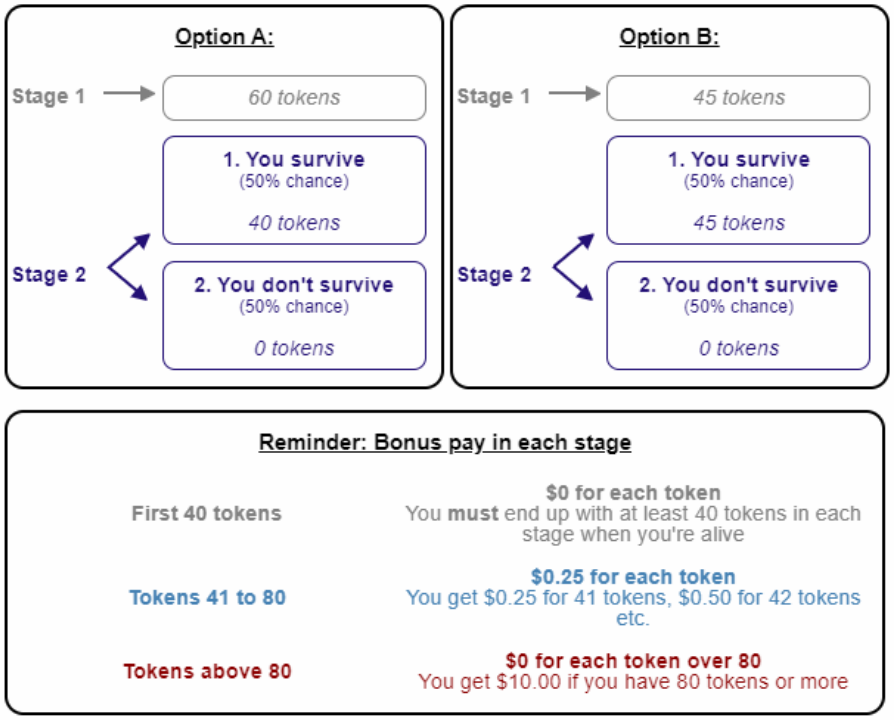


Figure 42: Selected decision for payout



After showing which decision was randomly selected for payout, a screen showed them what choice they made in the selected decision, with a detailed computation of the earned bonus.

Figure 43: Bonus pay



You chose:
Option A

This means you end up with **60 tokens** in stage 1. Because you survived, you end up with **40 tokens** in stage 2.

This gives you **$5.00** in stage 1:

First 40 tokens:	$0 per token	= $0
Tokens 41 to 80:	$0.25 per token	= $5.00
Tokens above 80:	$0 per token	= $0

This gives you **$0.00** in stage 2:

First 40 tokens:	$0 per token	= $0
Tokens 41 to 80:	$0.25 per token	= $0.00
Tokens above 80:	$0 per token	= $0

So, your total bonus pay is **$5.00** + **$0.00** = **$5.00**.

When clicking on the “next" button, the Qualtrics survey ended and participants were redirected to the AmeriSpeak platform.

7 Alternative wording and Reverse-Correlation condition

7.1 Wording

The experimental design comprised three different wording conditions: “annuity,” “Social Security,” and “insurance.” Each participant was randomized to one of these three wording conditions. The previous figures showed the “annuity” version of the experiment. Below we show an instruction screen (corresponding to instruction screen 3) for the other wording conditions. The only change is that the term “annuity” is replaced with “Social Security” or “insurance” in all questions.

Figure 44: Instruction - Screen 3 (Social Security wording)

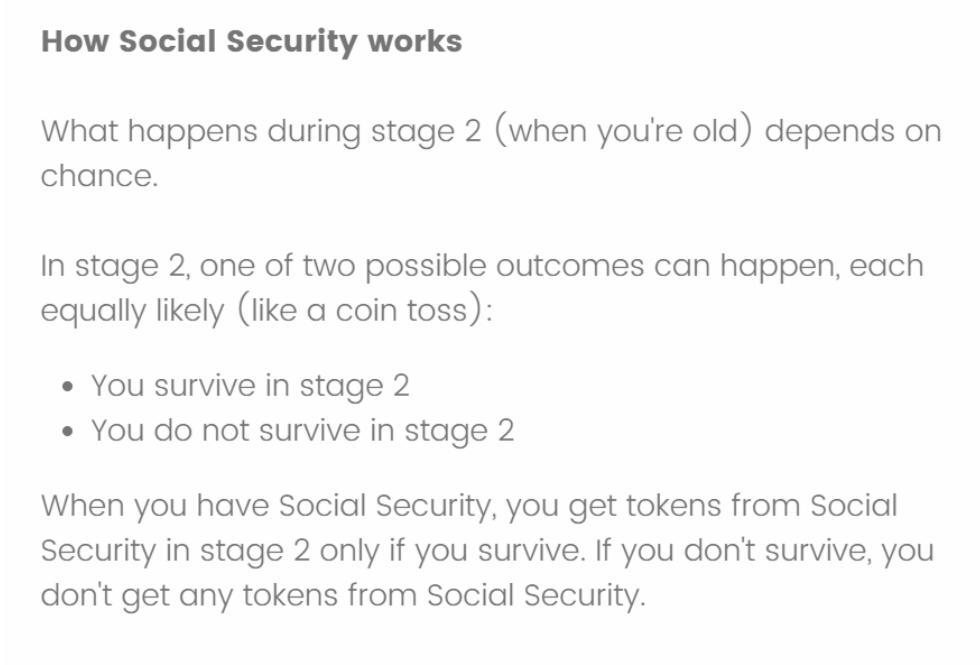


Figure 45: Instruction - Screen 3 (Insurance wording)

How insurance works

What happens during stage 2 (when you're old) depends on chance.

In stage 2, one of two possible outcomes can happen, each equally likely (like a coin toss):

- You survive in stage 2
- You do not survive in stage 2

When you have insurance, you get tokens from insurance in stage 2 only if you survive. If you don't survive, you don't get any tokens from insurance.

The wording for the annuity decision in the Benchmark condition had to be slightly rephrased in the Social Security condition: we used "buying into" rather than "buying" as the verb for acquiring the annuity from Social Security, as shown below.

Figure 46: Benchmark annuity decision - Screen 1 (Social Security wording)

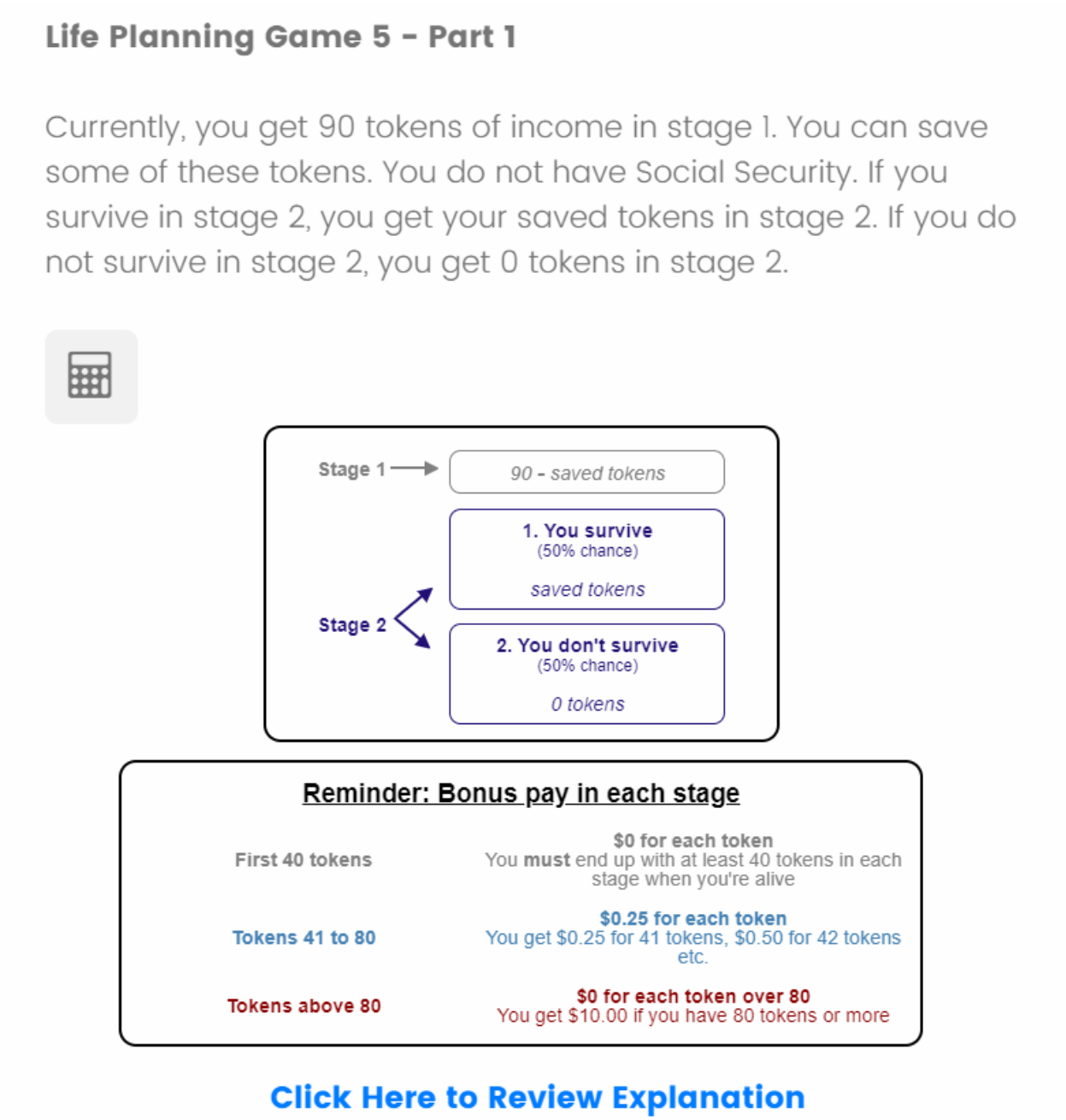
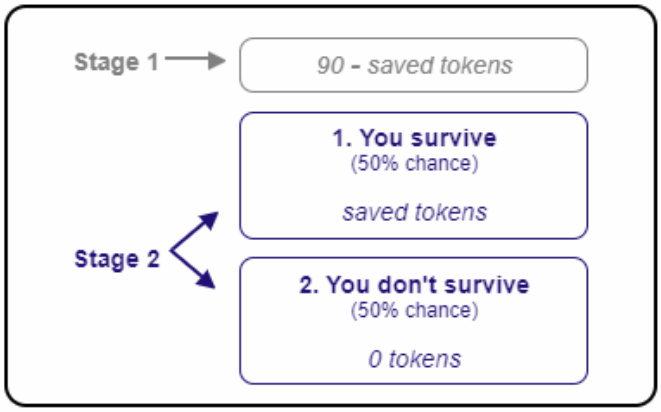


Figure 47: Benchmark annuity decision - Screen 2 (Social Security wording)

Life Planning Game 5 - Part 2

Here is what you currently have:



Reminder: Bonus pay in each stage

First 40 tokens	**$0 for each token** You **must** end up with at least 40 tokens in each stage when you're alive
Tokens 41 to 80	**$0.25 for each token** You get $0.25 for 41 tokens, $0.50 for 42 tokens etc.
Tokens above 80	**$0 for each token over 80** You get $10.00 if you have 80 tokens or more

Click Here to Review Explanation

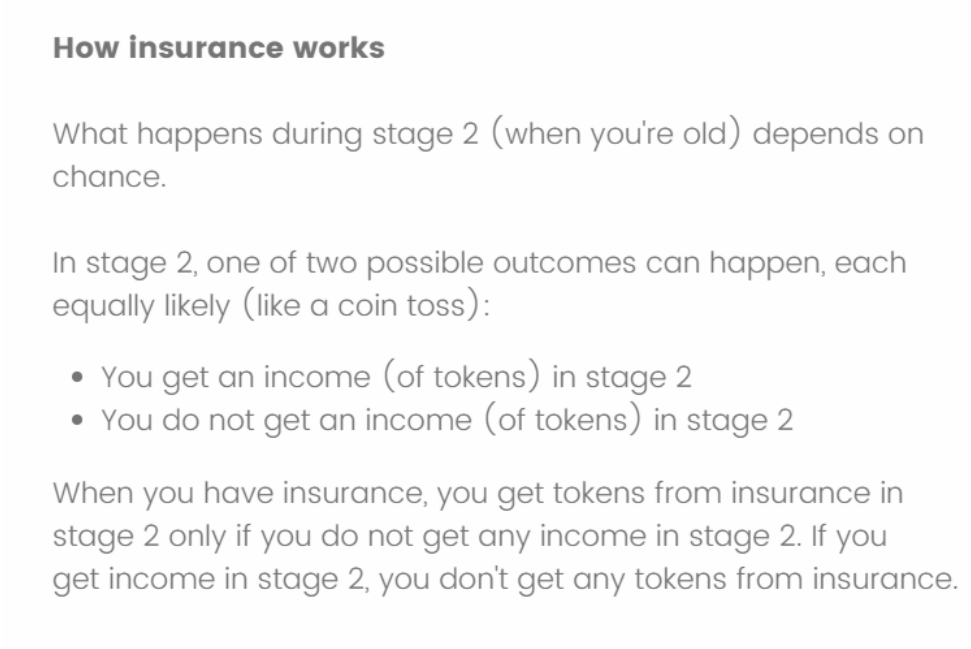
Would you like to pay 10 tokens in stage 1 to buy into Social Security, which then pays out 30 tokens in stage 2 if you survive (and 0 tokens if you do not survive)?

- ◯ Yes, I would like to buy into Social Security.
- ◯ No, I want to keep what I currently have, as shown above.

7.2 Reverse-Correlation condition

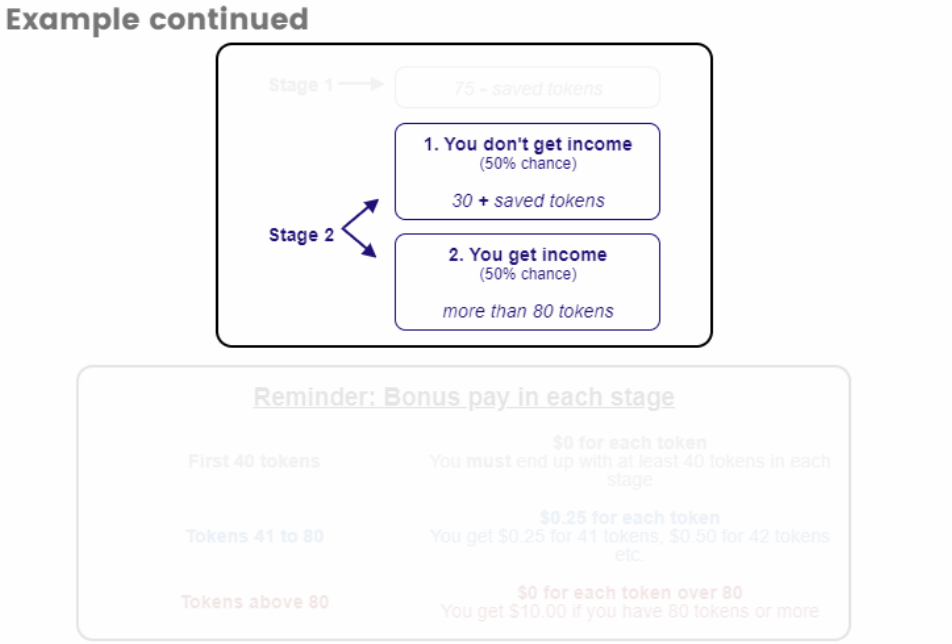
In the regular-correlation treatment arm, one of two outcomes could happen in stage 2 of the life-planning game: "you survive" or "you don't survive." In the Reverse-Correlation condition, the two possible stage-2 outcomes were replaced with "you don't get income" and "you get income," respectively. This condition was only displayed with the "insurance" wording.

Figure 48: Instruction - Screen 3 (Reverse-Correlation condition)



Below, we also show how the example was adapted to this setting.

Figure 49: Example 1 - Screen 2 (Reverse-Correlation condition)



In this particular example, you have insurance (you won't have it in all of your decisions). You get 30 tokens from insurance only if you don't get income in stage 2 of the game. If you get income in stage 2, you get no tokens from insurance in stage 2.

In **stage 2**, one of two possible outcomes can happen, each equally likely (like a coin toss):

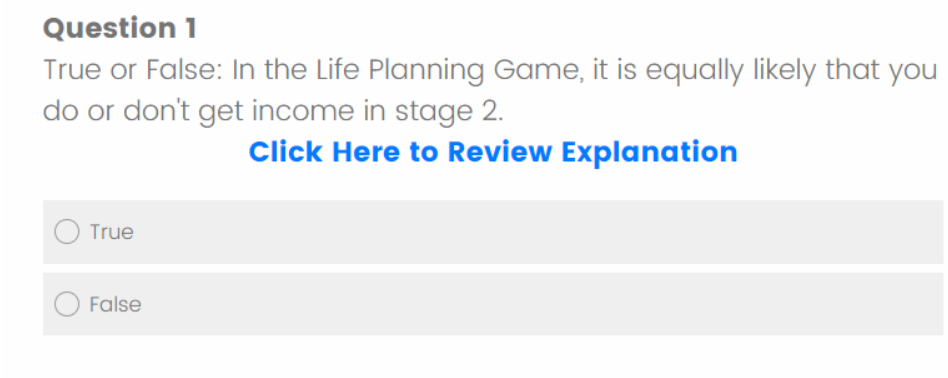
1. **You don't get income in stage 2:** You get 30 tokens from your insurance and the tokens you saved from stage 1 for stage 2. These tokens determine your bonus pay for stage 2.
2. **You get income in stage 2:** You get more than 80 tokens from income and savings in stage 2. These tokens determine your bonus pay for stage 2.

Because you need to end up with at least **40** tokens in stage 2, you **must save at least 10 tokens** to make up the difference between the **40** tokens you need in stage 2 and the 30 tokens you get from insurance if you don't get income in stage 2.

Comprehension questions were also adjusted in the Reverse-Correlation condition when needed,

as can be seen in the example below. All questions still tested the exact same knowledge.

Figure 50: Comprehension question 1 (Reverse-Correlation condition)



Annuity decisions in the Reverse-Correlation condition were also adapted to reflect the change in possible stage-2 outcomes:.

Figure 51: Annuity decision - Screen 1 (Reverse-Correlation condition)

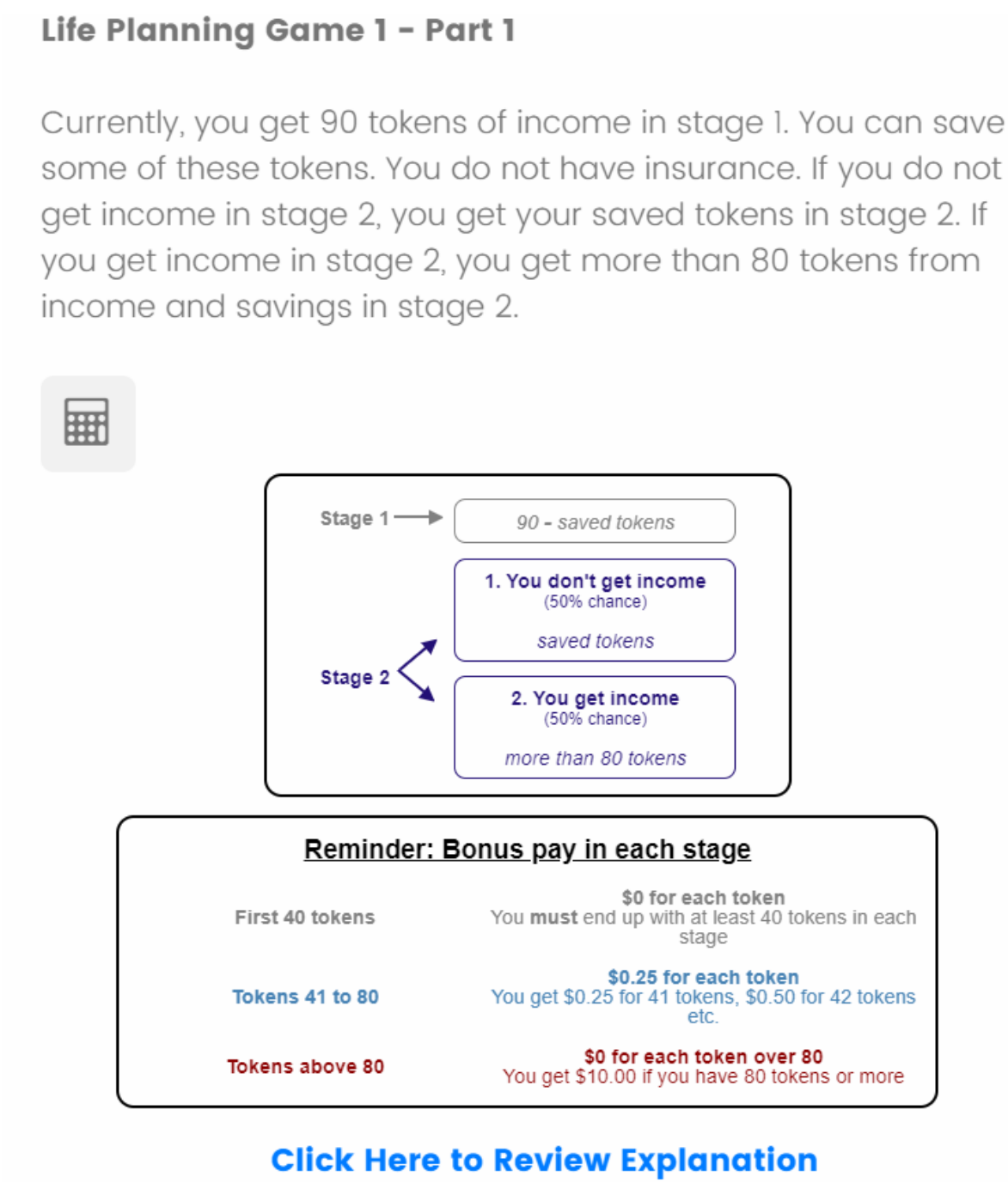
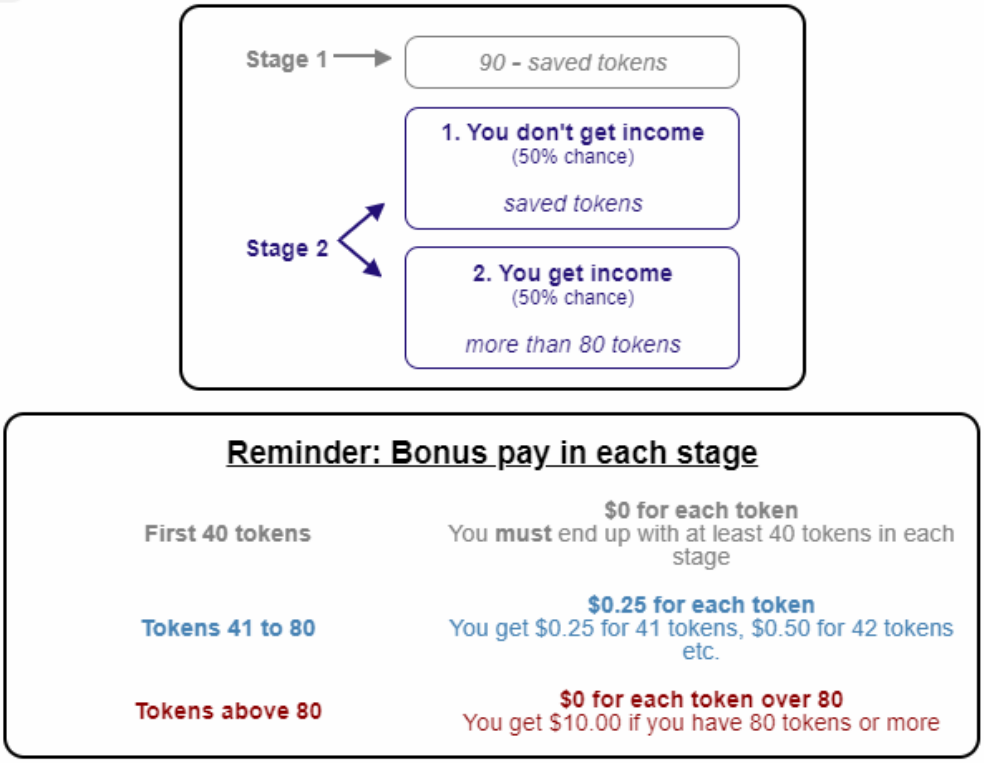


Figure 52: Annuity decision - Screen 2 (Reverse-Correlation condition)

Life Planning Game 1 - Part 2

Here is what you currently have:



Click Here to Review Explanation

Would you like to pay 10 tokens in stage 1 to buy insurance that pays out 30 tokens in stage 2 if you do not get income in stage 2 (and 0 tokens if you get income in stage 2)?

- ◯ Yes, I would like to buy insurance.
- ◯ No, I want to keep what I currently have, as shown above.