# Online Supplements – One size fits all? Designing financial incentives tailored to individual economic preferences.

This online supplementary file contains all additional details related to study. It contains the following Appendices:

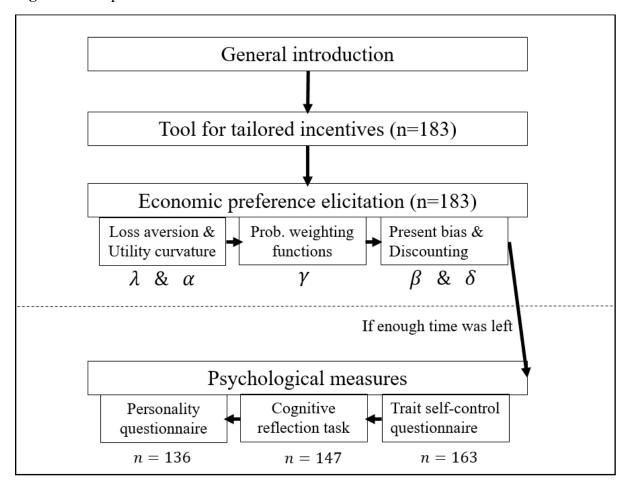
- A) Experimental flowchart, instructions, choice task, definitions used to elicit economic preferences and justification of hypotheses.
- B) Supplementary regression results for additional control variables and interactions

#### Online Appendix A: Experimental flowchart, instructions, choice tasks and definitions

## for economic preferences

Figure A1 shows the outline of the experiment, and the measures included in this study. The remainder of this Appendix will provide screenshots and instructions for each part of the experiment.

Figure A1: Experimental Flowchart



#### A.1. General introduction

Students were welcomed by the experimenter and received a short oral introduction into the goals of the study. They were told that they could ask any question that they had, and that there were no right or wrong answers.

#### A.2. Tool for tailored incentives

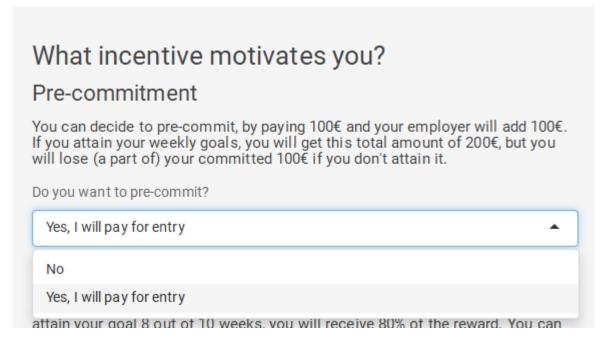
A direct link to this tool can be found here: <a href="https://referencepoints.shinyapps.io/Minecentive/">https://referencepoints.shinyapps.io/Minecentive/</a>

The following instruction was used: 'Please imagine the following situation: you have set yourself the goal of losing weight, so you decided to get a gym membership. Now, your employer wants to help you to lose weight. This may decrease your chances of taking up sick leave and increase your overall wellbeing. As such, your employer has offered to pay you a

financial reward if you use the gym at least three times each weekfor a 10 week period. Your employer is quite flexible, and besides the expected pay-out has no preference in how your financial reward is structured. Obviously, you yourself know best what kind of pay-out structure would motivate you to go to the gym and reach your goal of losing weight. Therefore, we ask you to indicate how you would like your pay-out(s) to be structured.'

Next, they could tailor their incentives in a menu, with a separate interactive heading for each of the incentive dimensions. Figures A2.1 to A2.4 show the choice options. Subject were given feedback of their selected incentive in the same panel (see Figure A2.5)

Figure A2.1: Pre-commitment dimension question



**Figure A2.2**. Pay-out frequency

# Pay-out frequency

For each week that you attain your goal you will be rewarded. For example, if you attain your goal 8 out of 10 weeks, you will receive 80% of the reward. You can choose to receive all of your pay-out at the end of the 10 week period, or to receive parts of this sum in weekly parts for each week you attain your weekly goal. Obviously, not attaining your goal will mean you do not receive any pay-out that week.

Weekly pay-outs

One pay-out

Weekly pay-outs

Weekly pay-outs

**Figure 2.3**. *Pay-out structure* 

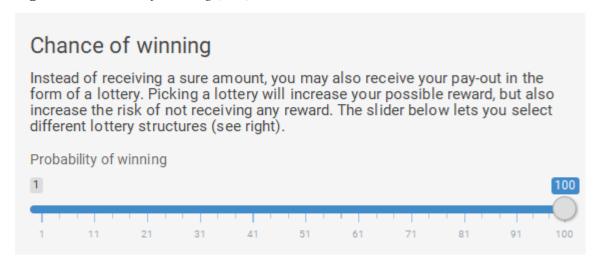
# Pay-out structure

If you decide on weekly pay-outs, pay-out amounts can be fixed for each week, starting low and increasing or the other way around. The slider below lets you select different structures (see right).

What should your pay-off structure be?



Figure 2.4. Chance of winning (risk)



**Figure A2.5**. *Interactive feedback panel for tailored incentive* 

# You commit 100 € of your own money

	Reward (Euro)	Chance of winning (%)
Week 1	20	100
Week 2	20	100
Week 3	20	100
Week 4	20	100
Week 5	20	100
Week 6	20	100
Week 7	20	100
Week 8	20	100
Week 9	20	100
Week 10	20	100

#### A.3. Economic preference elicitation

Economic preferences were elicited in three parts in a chained procedure, i.e. responses from each part carried on to the next. The first two parts, aimed at measuring loss aversion, utility curvature and probability weighting were based on the non-parametric method developed by Abdellaoui et al. (2016). A full justification of their approach can be found in the original paper, including the notational conventions, and theoretical assumptions needed to arrive at these elicitations. Throughout, each elicitation consisted of a bi-sectional approach with 4 choices followed by a slider that allowed respondents to modify and confirm their elicited indifference (see Figure A3.1. for an example). Furthermore, throughout this Appendix, all elicitation start with gains first and losses after, while in reality this was counterbalanced between respondents. Throughout this Appendix, we let  $\gt$ ,  $\gt$ ,  $\sim$  represent strict preference, weak preference and indifference respectively.

## A.3.1. Loss aversion and utility curvature

#### A.3.1.1. Loss aversion

Loss aversion is elicited by eliciting three indifferences, that link gains and losses together. First, we elicit an indifference  $g_p l \sim x_0$ , where  $x_0$  is the reference-point (set at 0\$), p is a probability that is kept constant throughout this first, and g is a gain of \$50. We elicit a loss l (e.g. -25\$). The next two indifferences involve certainty equivalence elicitation for outcome g and l, i.e. a certain outcome ( $x_1^+$  for gains,  $x_1^-$  for losses) that makes one indifferent between receiving g or l with probability p or  $x_0$  otherwise. These indifferences are denoted  $x_1^+ \sim g_p x_0$  and  $x_1^- \sim l_p x_0$ . Abdellaoui et al. (2016) show that loss aversion (denoted as index  $\lambda$ ), as defined by Köbberling and Wakker (2005), can be derived by:  $\lambda = x_1^+ / - x_1^-$ , where respondents with  $\lambda > 1$ ,  $\lambda = 1$ ,  $\lambda < 1$  are loss averse, loss neutral or gain seeking respectively.

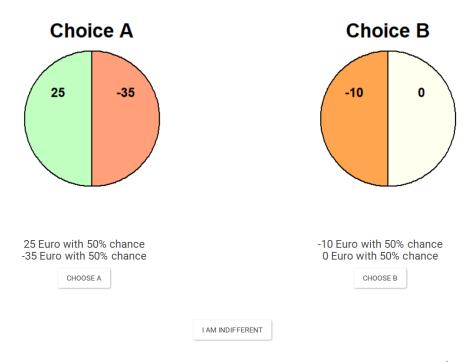
**Figure A3.1.** Example of elicitation procedure for indifference  $g_p l \sim x_0$ , where a respondent is indifferent for l = 25



#### A.3.1.2. Utility curvature

Now that we have linked together gains and losses compared to the reference-point  $x_0$ , we can elicit a series of indifference to estimate utility curvature for both gains and losses separately. In Abdellaoui et al. (2016) this process is based on the trade-off method developed by Wakker and Deneffe (1996), see Figure A3.2. That is, a standard sequence of outcomes is elicited for gains and losses, or in other words a sequence of outcomes spaced equally in terms of utility. This standard sequence elicitation is set-up in the same way for gains and losses. For gains, it starts by fixing a small loss  $\ell$  (in this study fixed at: -10\$), and eliciting a larger loss  $\mathcal{L}$  in the following indifference:  $x_{1p}^+\mathcal{L}\sim\ell_px_0$ . These two loss amounts serve as offset losses, in the standard sequence elicitation for gains. Next, the equally-spaced outcomes in the standard sequence are elicited by eliciting  $x_2^+$  in the following indifference:  $x_{2p}^+\mathcal{L}\sim\ell_px_1^+$ . This process (i.e.  $x_{jp}^+\mathcal{L}\sim x_{j-1p}^+\ell$ ,  $j=2,\ldots 4$ ) is applied 3 times, yielding a standard sequence with 5 data points  $(x_0,x_1^+,x_2^+,x_3^+,\text{ and }x_4^+)$ . For losses, a small gain (in this study fixed at: 10\$) is fixed, to elicit a larger loss  $\mathcal{G}$ , in the following indifference:  $\mathcal{G}_px_1^-\sim\mathcal{G}_px_0$ . Next, again a series of indifferences of the form  $\mathcal{G}_px_j^-\sim\mathcal{G}_px_{j-1}^-$ ,  $j=2,\ldots,4$  is elicited, which yields a standard sequence for losses with 5 data points  $(x_0,x_1^-,x_2^-,x_3^-,\text{ and }x_4^-)$ .

**Figure A3.1.** Example visual representation of elicitation procedure for utility curvature (indifference  $x_{1p}^+\mathcal{L}\sim\ell_p x_0$ , with  $x_1^+=25$ )



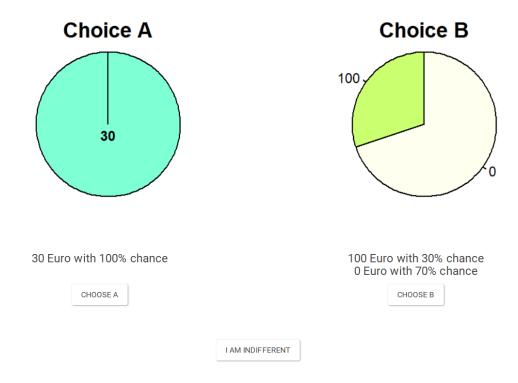
To calculate the utility curvature of the utility function for monetary gains  $U^+(\cdot)$  or losses  $U^-(\cdot)$ , we apply the following scaling:  $U^+(x_0) = 0$ ,  $U^-(x_4^-) = -1$  and  $U^+(x_4^-) = 1$ . Furthermore, as is usual in these type of studies, monetary outcomes are normalized such that each outcome is dived by the highest outcome in its' respective domain, i.e.  $x_0, x_1^-, x_2^-, x_3^-, x_4^-/x_4^-$  and  $x_0, x_1^+, x_2^+, x_3^+, x_4^+/x_4^+$ . Although the non-parametric method allows non-parametric estimation of utility curvature, in this study the most commonly used power utility family is used estimated by non-linear least squares. This allows the estimates to be compared with earlier work. For this family,  $U^+(x) = x^\alpha$ , where represents the utility function over monetary outcomes. For losses, this is estimated by  $U^-(x) = -(-(x)^\alpha)$  with

 $\alpha > 0$ . For gains [losses],  $\alpha > 1$  corresponds to convex [concave] utility,  $\alpha = 1$  corresponds to linear utility, and  $\alpha < 1$  corresponds to concave [convex] utility.

# A.3.2. Probability weighting functions

As in Lipman and colleagues (2019), probability weighting is elicited with the method developed by Abdellaoui (2000). This method was employed as follows: to the probability weighting functions  $w^+(p)$  and  $w^-(p)$ , the certainty equivalents  $x_p^+$  and  $x_p^-$  of the prospects  $x_{4p}^+ x_0$  and  $x_{4p}^- x_0$ , for the following probabilities: p = 0.1, 0.3, 0.5, 0.7, 0.9. The outcomes  $x_4^+$  and  $x_4^-$  are the maximum (minimum) outcome elicited in the standard sequence. Therefore, it follows from the chosen scaling of utility that  $U(x_p^+) = w^+(p)$  and  $-U^-(x_p^-) = w^-(p)$ . The values of  $U^+(x_p^+)$  and  $LU^-(x_p^-)$  are interpolated from their respective standard sequences. Figure A3.3 shows an example of a gamble scenario for gains.

**Figure A3.3.** Example visual representation of choice options used for eliciting probability weighting for gains  $(x_p^+ \sim x_{4n}^+ x_0)$ , with  $x_4^+ = 100$ , p = 0.3.



To summarize the shape of the weighting functions Tversky and Kahneman's one-parameter inverse S-shaped probability weighting function is used, i.e.  $w^i(p) = p^{\gamma}/(p^{\gamma} + (1-p)^{\gamma})^{1/\gamma}$  with i = +, -. Again, this is estimated by nonlinear least squares. The  $\gamma$ -parameter controls for the shape of the probability weighting function. If  $\gamma = 1$  there is no probability transformation and  $w^i(p) = p$ . However, if  $\gamma < 1$ , decision makers underweight large probabilities and overweight small probabilities. This corresponds to the commonly found inverse S-shaped weighting function. If  $\gamma > 1$ , the opposite pattern holds, corresponding to an S-shaped weighting function.

#### A.3.3. Present bias & Discounting

Present bias and discounting were elicited by means of the approach of Laibson (1997). This model assumes the discounted utility model, i.e. utility for timed outcome (x, t) can be evaluated by DU(x, t) = D(t)U(x), where  $D(\cdot)$  refers to the discounting function. To reflect the sign-dependent nature of this experiment, we modify this to:  $U(x, t) = D^i(t)U^i(x)$ , with i = + for gains and i = - for losses. In the quasi-hyperbolic discounting model,  $D^i(t) = \beta^i/(1 + r^i)^t$ , with i = +, - for gains and losses respectively,  $0 < \beta \le 1$  for t > 0 and D(t) = 1 otherwise, and r reflects the per-period discount rate. In this part of the elicitation  $x_T^+$  and  $x_T^-$  refer to the highest outcome in the standard sequences for gains and losses divided by 2, i.e.  $x_4^+/2$  and  $x_4^-/2$ . These outcomes were divided by half to decrease the chances extrapolation beyond the measured standard sequence was necessary.  $\beta$  and r were elicited for gains and losses by means of the following indifferences (see Figure A3.4 for an example of visual stimuli used),

$$(x_T^+, 0 \ weeks) \sim (y_T^+, 5 \ weeks)$$

$$(x_T^+, 5 weeks) \sim (z_T^+, 10 weeks)$$

And for losses by:

$$(x_T^-, 0 \text{ weeks}) \sim (y_T^-, 5 \text{ weeks})$$

$$(x_T^-, 5 \text{ weeks}) \sim (z_T^-, 10 \text{ weeks})$$

**Figure A3.4.** Visual representation of choice options used for eliciting present bias and discounting for losses.



In both cases, we can evaluate these indifferences as:

$$U^{i}(x_{T}^{i})D^{i}(0) = U^{i}(y_{T}^{i})D^{i}(5) \iff U^{i}(x_{T}^{i})(\frac{1}{(1+r^{i})^{1}}) = U^{i}(y_{T}^{i})(\frac{\beta^{i}}{(1+r^{i})^{5}})$$

$$U^i \left( x_T^i \right) D^i (5) = \ U^i (z_T^i) D^i (10) \iff \ U^i (x_T^i) (\frac{\beta^i}{\left( 1 + r^i \right)^5}) = U^i (y_T^i) (\frac{\beta^i}{\left( 1 + r^i \right)^{10}})$$

After rearranging the second indifference we find:

$$r^i = \frac{1}{\left(\frac{U^i(z_T^i)}{U^i(x_T^i)}\right)^{1/5}}$$

And after we have determined  $r^i$ ,  $\beta$  is found by:

$$\beta^i = \frac{U^i(y_T^i)}{U^i(x_T^i)\frac{1}{(1+r^i)^{1/5}}}$$

# A4. Justification of hypotheses

Measure	Definition (in words)	Domain	Justification
Loss aversion $(\lambda)$	The degree to which losses receive more weight than gains relative to a reference-point of \$0 additional dollars	Pre-commit	Losses are only (possibly) incurred if pre-commitment is chosen, i.e. loss aversion should be related to Pre-commit.
Utility curvature (α) Gains	The degree to which each additional dollar gained compared to \$0 diminishes.	Timing & Sequence	If the utility from each dollar diminishes fast, more utility can be gained by receiving weekly amounts compared to one lump sum. Furthermore, a linear scheme should be more beneficial for those with strong diminishing utility of monetary gains.
Utility curvature ( $\alpha$ ) losses	The degree to which each additional dollar lost compared to \$0 diminishes.	Timing & Sequence & Pre-commit	Losses are only (possibly) incurred if pre-commitment is chosen, i.e. utility curvature for losses could also be related to Pre-commit. The same intuition as for gains hold when losses are possible
Probability weighting (γ) Gains	The degree to which probabilities of gains compared to \$0 are overweighted	Risk	If small probabilities are overweighted (inverse S-shaped), lottery incentives with low chances of winning should be more optimal. If on the other hand intermediate probabilities are overweighted (S-shaped), lottery incentives with probabilities should be more optimal
Probability weighting $(\gamma)$ Losses	The degree to which probabilities of losses compared to \$0 are overweighted	Risk & Pre- commit	Losses are only (possibly) incurred if pre-commitment is chosen, i.e. probability weighting for losses could also be related to Pre-commit.
Present Bias ( $\beta$ ) Gains	The degree to which gains compared to 0\$ not obtained at present lose positive value	Timing	If one always prefers to obtain gains in the present (i.e. is present biased), weekly amount are more optimal.
Present Bias ( $\beta$ ) losses	The degree to which losses compared to 0\$ not obtained at present lose negative value	Timing & Pre-commit	Losses are only (possibly) incurred if pre-commitment is chosen, i.e. present bias for losses could also be related to Pre-commit.
Discounting $(\delta)$ Gains	The degree to which delaying gains compared to 0\$ changes their value	Sequence	If gains are discounted positively (negatively), one prefers to receive gains as soon (late) as possible, i.e. an ascending (descending) pay-out should be preferred. Stronger discounting should lead to a steeper sequence selected.
Discounting $(\delta)$ Losses	The degree to which delaying losses compared to 0\$ changes their value	Sequence & Pre-commit	Losses are only (possibly) incurred if pre-commitment is chosen, i.e. loss discounting could be related to Pre-commit.

Note: A full theoretical model including predictions for each of these parameters is beyond the scope of this paper

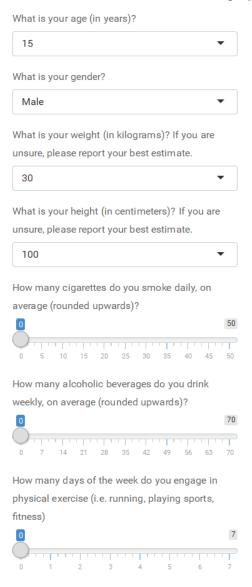
#### A5. Psychological measures

After asking respondents to self-report on several health-related characteristics, total of three psychological measures were used, which are reprinted in this Appendix. These questionnaires measured self-control (Tangney et al., 2018), cognitive reflection (Toplak et al., 2011), and personality (Francis et al., 1992).

# A.4.1. Self-reported health behavior

The following demographics were collected:

Please answer these final demographic questions.



## A.4.1. Trait self-control questionnaire

The questionnaire was adapted from Tangney et al. (2018), and measures self-control as a trait, i.e. the degree to which individuals in general are able to self-regulate. Items marked with \* require reverse coding, and it is reported as a mean in the main text.

The following statements may reflect how you perceive yourself. Please indicate below to what extent these statements reflect how you typically are, by circling the answer that applies.

	Not a	Not at all			Ve	Very much	
		1				1	
1	I am good at resisting temptation	1	2	3	4	5	
2*	I have a hard time breaking bad habits.	1	2	3	4	5	
3*	I am lazy	1	2	3	4	5	
4*	I say inappropriate things.	1	2	3	4	5	
5*	I do certain things that are bad for me, if they are	1	2	3	4	5	
	fun.						
6	I refuse things that are bad for me.	1	2	3	4	5	
7*	I wish I had more self-discipline.	1	2	3	4	5	
8	People would say that I have iron self- discipline.	1	2	3	4	5	
9*	Pleasure and fun sometimes keep me from getting work done.	1	2	3	4	5	
10*	I have trouble concentrating.	1	2	3	4	5	
11*	I am able to work effectively toward long-term goals.	1	2	3	4	5	
12*	Sometimes I can't stop myself from doing something, even if I know it is wrong.	1	2	3	4	5	
13*	I often act without thinking through all the alternatives.	1	2	3	4	5	

## A.4.2. Cognitive reflection task (CRT)

This three item task developed by Toplak et al. (2011) aims to quantify the degree to which individuals rely on their automatic system by asking questions which seems to have an immediate, simple and right answer, which only after reflecting on it for some time appears to be in fact *wrong*. The CRT is scored as the amount of correct answers. The questions were answered by with a pen by writing down the answer on the open space.

1. A bat and a ball cost \$1.10 in total. The bat costs \$1.00 more than the ball. How much
does the ball cost? cents
2. If it takes 5 machines 5 minutes to make 5 widgets, how long would it take 100
machines to make 100 widgets? minutes

3. In a lake, there is a patch of lily pads. Every day, the patch doubles in size. If it takes 48 days for the patch to cover the entire lake, how long would it take

#### A.4.3. Personality questionnaire

The last questionnaire used is a revised short-form version of the Revised Eysenck Personality Questionnaire, which captures personality on 4 domains. Items 1, 10, 12, 15, 19 and 22 capture Neuroticism. Items 2, 4, 14, 16, 21 and 24 capture Extraversion. Items 3, 6, 9,

13, 17 and 23 capture Psychoticism, and finally, items 5, 7, 8, 11, 18, and 20 capture Social desirability. Items marked with \* are recoded, meaning that code 1 means has characteristic related to personality dimension and code 0 means does not relate to that dimension. Means are reported in main text.

Please answer the following questions by answering "Yes" or "No" (circle which applies). There are no right or wrong answers. It is not necessary to think very long about these questions.

1	Does your mood often go up and down?	Yes	No
2	Are you a talkative person?	Yes	No
3*	Would being in debt worry you?	Yes	No
4	Are you rather lively?	Yes	No
5*	Were you ever greedy by helping yourself to more than your share of anything?	Yes	No
6	Would you take drugs which may have strange or dangerous effects?	Yes	No
7*	Have you ever blamed someone for doing something you knew was really your fault?	Yes	No
8	Do you always practice what you preach?	Yes	No
9	Do you prefer to go your own way rather than act by the rules?	Yes	No
10	Do you often feel 'fed-up'?	Yes	No
11*	Have you ever taken anything (even a pin or button) that belonged to someone else?	Yes	No
12	Would you call yourself a nervous person?	Yes	No
13	Do you think marriage is old-fashioned and should be done away with?	Yes	No
14	Can you easily get some life into a rather dull party?	Yes	No
15	Are you a worrier?	Yes	No
16*	Do you tend to keep in the background on social occasions?	Yes	No
17*	Does it worry you if you know there are mistakes in your work?	Yes	No
18*	Have you ever cheated at a game?	Yes	No
19	Do you suffer from 'nerves'?	Yes	No
20*	Have you ever taken advantage of someone?	Yes	No
21*	Are you mostly quiet when you are with other people?	Yes	No
22	Do you often feel lonely?	Yes	No
23*	Is it better to follow society's rules than go your own way?	Yes	No
24	Do other people think of you as being very lively	Yes	No

#### Appendix B: Regression results including additional control variables and interactions

A full overview of all models ran can be found below, which confirm that selected incentives could not reliably be predicted from any of the measures collected (except BMI for the timing dimension). For the Timing dimension, after many exploratory regression analyses, a model with some significant predictors could be developed, which is reported in Table B2. Due to the exploratory process through which these results were obtained, no conclusions are based off of it in the main text. Although more model specifications were possible, any correction for multiple hypothesis testing (which would be advised given the plethora of tests applied here) would quickly lead to null results.

**Table B1:** All models ran, including significant (p < 0.05) predictors (**boldfaced**), adjusted R-squared, Akaike's Information Criterions (AIC) and Bayesian Information Criterion (BIC).

**Note:** All models are specified as R model formulas, where x~y indicates predicting x by y. \* signifies that these economic preferences were also not a significant predictor of incentive choice after controlling for all demographics and/or psychological measures,

Outcome	Model ran	$R^2$	AIC	BIC
Pre-commit	Logistic regression			
(PRC)				
	Economic preferences			
	PRC ~ Loss aversion*	0.012	231.15	233.13
	PRC ~ Utility curvature (losses)*	< 0.001	233.13	239.54
	PRC ~ Probability weighting (losses)*	0.009	231.75	238.2
	PRC ~ Present bias (losses)*	0.004	233.24	239.65
	PRC ~ Discounting (losses)*	0.009	231.37	237.78
	PRC ~ Loss aversion + Utility curvature	0.026	236.23	255.46
	(losses) + Probability weighting			
	(losses) + Present bias (losses) +			
	Discounting (losses) *			
	<u>Demographics</u>			
	PRC ~ BMI	0.002	233.02	239.43
	PRC ~ Age	< 0.001	233.31	239.72
	PRC ~ Gender	0.010	231.02	237.43
	PRC ~ Exercise + Smoking + Alcohol	< 0.001	236.69	249.51
	Psychological measures			
	PRC ~ Cognitive reflection task (CRT)	< 0.001	192.18	198.16
	PRC ~ Trait self-control (TSC)	< 0.001	212.33	218.52

	PRC ~ Eysenck Personality Questionnaire (EPQ) – Extraversion (E) + Neuroticism (N) + Psychoticism (P) +	0.04	177.35	191.92
	Social Desirability (SD)  PRC ~ BMI + Age + Gender + CRT + TSC + EPQ-E + EPQ-N + EPQ-P + EPQ-SD	0.05	188.10	220.14
Timing	Logistic regression			
	Economic preferences			
	TIMING ~ Loss aversion**	<0.001	255.48	261.89
	TIMING ~ Utility curvature (gains)*	0.017	251.71	258.12
	TIMING ~ Utility curvature (losses)*	0.011	252.80	259.21
	TIMING ~ Present bias (gains)*	0.007	252.92	259.31
	TIMING ~ Present bias (losses)  Note: Present Bias (losses) was only significant after controlling for	0.018	252.17	285.58
	demographics  TIMING ~ Loss aversion + Utility curvature (gains) + Utility curvature (losses) + Present bias (gains) + Present bias (losses)	0.059	250.36	269.55
	Note: Present Bias (losses) was significant after controlling for demographics			
	<u>Demographics</u>			
	TIMING ~ BMI	0.017	252.23	258.64
	TIMING ~ Age	< 0.001	255.49	261.90
	TIMING ~ Gender	< 0.001	255.48	261.89
	TIMING ~ Exercise + Smoking + Alcohol	0.010	257.80	270.61
	<u>Psychological measures</u>			
	TIMING ~ Cognitive reflection task (CRT)	0.020	205.21	211.19
	TIMING ~ Trait self-control (TSC)	0.010	227.67	233.85
	TIMING ~ Eysenck Personality Questionnaire (EPQ) – Extraversion (E) + Neuroticism (N) + Psychoticism (P) + Social Desirability (SD)	0.020	195.48	210.04
	TIMING ~ BMI + Age + Gender + CRT +TSC+EPQ-E + EPQ-N + EPQ-P + EPQ-SD	0.070	199.64	231.68
Sequence	Linear regression			
	Economic preferences			
	SEQUENCE ~ Loss aversion*	0.001	427.88	437.49
	SEQUENCE ~ Utility curvature (gains)*	0.007	426.87	436.48

	CEOUENCE 14:1:4	0.001	427.98	437.59
	SEQUENCE ~ Utility curvature	0.001	427.98	437.39
	(losses)*  SEQUENCE ~ Discounting (gains)*	0.011	426.14	435.75
	SEQUENCE Discounting (gams)*			
	SEQUENCE - Discounting (losses)*	0.001	427.93	437.54
	SEQUENCE ~ Loss aversion + Utility	0.022	432.09	454.52
	curvature (gains) + Utility curvature			
	(losses) + Discounting (gains)+			
	Discounting (losses)*			
	<u>Demographics</u>	0.000	426.51	126 12
	SEQUENCE ~ BMI	0.009	426.51	436.12
	SEQUENCE ~ Age	0.010	426.22	435.83
	SEQUENCE ~ Gender	<0.001	428.09	437.71
	SEQUENCE ~ Exercise + Smoking + Alcohol	0.009	430.48	446.50
	Psychological measures			
	SEQUENCE ~ Cognitive reflection task	< 0.001	340.59	349.56
	(CRT)	<u> </u>	<u> </u>	
	SEQUENCE ~ Cognitive reflection task (TSC)	< 0.001	371.62	380.91
	SEQUENCE ~ Eysenck Personality	0.030	315.68	333.16
	Questionnaire (EPQ) – Extraversion (E)	0.000	010.00	000.10
	+ Neuroticism (N) + Psychoticism (P) +			
	Social Desirability (SD)			
	SEQUENCE ~ BMI + Age + Gender +	0.110	315.78	350.73
	CRT +TSC+ EPQ-E + EPQ-N + EPQ-P	0.120		
	+ EPQ-SD			
	Linear regression			
Risk	$\mathcal{C}$			
Risk				
Risk	Economic preferences  RISK ~ Loss aversion*	0.001	1685.40	1695.01
Risk	Economic preferences	0.001 0.008	1685.40 1684.09	1695.01 1693.70
Risk	Economic preferences  RISK ~ Loss aversion*			
Risk	Economic preferences  RISK ~ Loss aversion*  RISK ~ Probability weighting (gains)*	0.008	1684.09	1693.70
Risk	Economic preferences  RISK ~ Loss aversion*  RISK ~ Probability weighting (gains)*  RISK ~ Probability weighting (losses)*	0.008 0.011	1684.09 1683.45	1693.70 1693.06
Risk	Economic preferences  RISK ~ Loss aversion*  RISK ~ Probability weighting (gains)*  RISK ~ Probability weighting (losses)*  RISK ~ Loss aversion + Utility	0.008 0.011	1684.09 1683.45	1693.70 1693.06
Risk	Economic preferences  RISK ~ Loss aversion*  RISK ~ Probability weighting (gains)*  RISK ~ Probability weighting (losses)*  RISK ~ Loss aversion + Utility curvature (losses) + Probability	0.008 0.011	1684.09 1683.45	1693.70 1693.06
Risk	Economic preferences  RISK ~ Loss aversion*  RISK ~ Probability weighting (gains)*  RISK ~ Probability weighting (losses)*  RISK ~ Loss aversion + Utility curvature (losses) + Probability weighting (losses) + Present bias	0.008 0.011	1684.09 1683.45	1693.70 1693.06
Risk	Economic preferences  RISK ~ Loss aversion*  RISK ~ Probability weighting (gains)*  RISK ~ Probability weighting (losses)*  RISK ~ Loss aversion + Utility curvature (losses) + Probability weighting (losses) + Present bias (losses) + Discounting (losses)*	0.008 0.011	1684.09 1683.45	1693.70 1693.06
Risk	Economic preferences  RISK ~ Loss aversion*  RISK ~ Probability weighting (gains)*  RISK ~ Probability weighting (losses)*  RISK ~ Loss aversion + Utility curvature (losses) + Probability weighting (losses) + Present bias (losses) + Discounting (losses)*  Demographics	0.008 0.011 0.020	1684.09 1683.45 1685.78	1693.70 1693.06 1701.80
Risk	Economic preferences  RISK ~ Loss aversion*  RISK ~ Probability weighting (gains)*  RISK ~ Probability weighting (losses)*  RISK ~ Loss aversion + Utility curvature (losses) + Probability weighting (losses) + Present bias (losses) + Discounting (losses)*  Demographics  RISK ~ BMI	0.008 0.011 0.020 0.003	1684.09 1683.45 1685.78 1684.95	1693.70 1693.06 1701.80 1694.56
Risk	Economic preferences  RISK ~ Loss aversion*  RISK ~ Probability weighting (gains)*  RISK ~ Probability weighting (losses)*  RISK ~ Loss aversion + Utility curvature (losses) + Probability weighting (losses) + Present bias (losses) + Discounting (losses)*  Demographics  RISK ~ BMI  RISK ~ Age	0.008 0.011 0.020 0.003 0.001	1684.09 1683.45 1685.78 1684.95 1685.39	1693.70 1693.06 1701.80 1694.56 1695.00
Risk	Economic preferences  RISK ~ Loss aversion*  RISK ~ Probability weighting (gains)*  RISK ~ Probability weighting (losses)*  RISK ~ Loss aversion + Utility curvature (losses) + Probability weighting (losses) + Present bias (losses) + Discounting (losses)*  Demographics  RISK ~ BMI  RISK ~ Age  RISK ~ Gender	0.008 0.011 0.020 0.003 0.001 <0.001	1684.09 1683.45 1685.78 1685.78 1684.95 1685.39 1685.44	1693.70 1693.06 1701.80 1694.56 1695.00 1695.05
Risk	Economic preferences  RISK ~ Loss aversion*  RISK ~ Probability weighting (gains)*  RISK ~ Probability weighting (losses)*  RISK ~ Loss aversion + Utility curvature (losses) + Probability weighting (losses) + Present bias (losses) + Discounting (losses)*  Demographics  RISK ~ BMI  RISK ~ Age  RISK ~ Gender  RISK ~ Exercise + Smoking + Alcohol  Psychological measures	0.008 0.011 0.020 0.003 0.001 <0.001	1684.09 1683.45 1685.78 1685.78 1684.95 1685.39 1685.44	1693.70 1693.06 1701.80 1694.56 1695.00 1695.05 1703.62
Risk	Economic preferences  RISK ~ Loss aversion*  RISK ~ Probability weighting (gains)*  RISK ~ Probability weighting (losses)*  RISK ~ Loss aversion + Utility curvature (losses) + Probability weighting (losses) + Present bias (losses) + Discounting (losses)*  Demographics  RISK ~ BMI  RISK ~ Age  RISK ~ Gender  RISK ~ Exercise + Smoking + Alcohol  Psychological measures  RISK ~ Cognitive reflection task (CRT)	0.008 0.011 0.020 0.003 0.001 <0.001 0.010	1684.09 1683.45 1685.78 1685.78 1684.95 1685.39 1685.44 1687.60	1693.70 1693.06 1701.80 1694.56 1695.00 1695.05 1703.62
Risk	Economic preferences  RISK ~ Loss aversion*  RISK ~ Probability weighting (gains)*  RISK ~ Probability weighting (losses)*  RISK ~ Loss aversion + Utility curvature (losses) + Probability weighting (losses) + Present bias (losses) + Discounting (losses)*  Demographics  RISK ~ BMI  RISK ~ Age  RISK ~ Gender  RISK ~ Exercise + Smoking + Alcohol  Psychological measures  RISK ~ Cognitive reflection task (CRT)  RISK ~ Trait self-control (TSC)	0.008 0.011 0.020 0.003 0.001 <0.001 0.010 <0.001	1684.09 1683.45 1685.78 1685.78 1685.39 1685.44 1687.60 1372.68 1517.89	1693.70 1693.06 1701.80 1694.56 1695.00 1695.05 1703.62 1381.65 1287.15
Risk	Economic preferences  RISK ~ Loss aversion*  RISK ~ Probability weighting (gains)*  RISK ~ Probability weighting (losses)*  RISK ~ Loss aversion + Utility curvature (losses) + Probability weighting (losses) + Present bias (losses) + Discounting (losses)*  Demographics  RISK ~ BMI  RISK ~ Age  RISK ~ Gender  RISK ~ Exercise + Smoking + Alcohol  Psychological measures  RISK ~ Cognitive reflection task (CRT)  RISK ~ Trait self-control (TSC)  RISK ~ Eysenck Personality	0.008 0.011 0.020 0.003 0.001 <0.001 0.010	1684.09 1683.45 1685.78 1685.78 1684.95 1685.39 1685.44 1687.60	1693.70 1693.06 1701.80 1694.56 1695.00 1695.05 1703.62
Risk	Economic preferences  RISK ~ Loss aversion*  RISK ~ Probability weighting (gains)*  RISK ~ Probability weighting (losses)*  RISK ~ Loss aversion + Utility curvature (losses) + Probability weighting (losses) + Present bias (losses) + Discounting (losses)*  Demographics  RISK ~ BMI  RISK ~ Age  RISK ~ Gender  RISK ~ Exercise + Smoking + Alcohol  Psychological measures  RISK ~ Cognitive reflection task (CRT)  RISK ~ Trait self-control (TSC)	0.008 0.011 0.020 0.003 0.001 <0.001 0.010 <0.001	1684.09 1683.45 1685.78 1685.78 1685.39 1685.44 1687.60 1372.68 1517.89	1693.70 1693.06 1701.80 1694.56 1695.00 1695.05 1703.62 1381.65 1287.15

RISK ~ BMI + Age + Gender + CRT +	0.030	1277.66	1312.61
TSC + EPQ-E + EPQ-N + EPQ-P +			
EPQ-SD			

For the Timing dimension, after exploring many different model specifications, one of the better fitting models included: present bias for losses, Eysenck Personality Questionnaire dimensions: Neuroticism and Psychoticism, Cognitive Reflection and BMI. Logistic regression results are reported in Table B2.

**Table B2.** Results for exploratory logistic regression for timing dimension.

Predictor	Estimate	SE	Z-value	p value
(Intercept)	-0.46	1.42	-0.33	0.74
Present bias (losses)	1.65	0.94	1.76	0.08
Eysenck Personality	1.71	0.97	1.76	0.08
Questionnaire (Neuroticism)				
Eysenck Personality	0.98	1.02	0.97	0.34
Questionnaire (Psychoticism)				
Cognitive reflection	-0.38	0.16	-2.33	0.02
BMI	-0.09	0.04	-1.80	0.07

These results indicate that: those with weaker present bias for losses (marginally significant), those are more prone to neuroticism (marginally significant), those who more on their automatic system, and those with a lower BMI (marginally significant) are more likely to choose a weekly pay-out structure.