

How to Motivate People to Save? Self-control as a Moderator between Mental Simulation and Saving Behavior

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Abstract

Research has examined how to motivate people for explicit goals (e.g. for a new cellphone), but it is uncertain how people can be motivated to save for unspecific matters. Research suggests that mental simulation can substitute for actual experiences, thereby affecting people's preferences and behavior. The current study examines whether mental simulating being very poor or very rich evokes the similar feeling as being in that situation, and if this mental simulation affects people's saving behavior. Self-control functioned as a moderator to test for interaction with mental simulation on saving behavior. A significant effect of self-control on saving behavior was found. There was no effect of mental simulation on saving behavior as well as no interaction effect between mental simulation and self-control on saving behavior. More detailed representations during mental simulation might be needed to find an effect of mental simulation on saving behavior.

Keywords: mental simulation, self-control, saving behavior, rich, poor

Wordcount: 5415

Date: June 18, 2018

Manuscript can be made publicly accessible

Performed at: Utrecht University, Faculty of Social and Behavioral Sciences

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Introduction

Imagine you just heard you lost your job. You are driving home when every light on your dashboard flashes on and smoke appears from under the hood. This is one of the worst things that can happen to you. Not only will you have to pay for a tow truck, but you also will be faced with a big repair bill as well. And since you are unemployed, you do not have an income anymore. Do you have set aside some savings for emergency scenarios like these? According to Nibud (Nationaal Instituut voor Budgetvoorlichting, 2017), an independent information institute, 2.5 million out of 7.7 million households in the Netherlands do not have enough money for emergencies (Nationaal Instituut voor Budgetvoorlichting, 2017). It is important that people have some money saved they can use for emergencies at all times (Nationaal Instituut voor Budgetvoorlichting, 2017). Research has investigated how to motivate people to save for specific goals (e.g., for a new television), but it is unclear how people can be motivated for unspecific matters. The current study explains why certain individuals do and others do not save money for unforeseen circumstances. Additionally, I examine how people can be motivated to save money for those circumstances.

Why don't people save money for unspecific matters?

How becomes one individual a big spender, while another individual, with similar income and socioeconomic characteristics, saves a big part of his or her income? An important framework is the lifecycle savings model by Modigliani and Brumberg (1954). According to the lifecycle savings model, people save when young to finance consumptions during their retirement (Modigliani & Brumberg, 1954; Bloom, Canning, & Graham, 2003). Economists have used the lifecycle savings model to study individuals' saving choices and found that individuals save money so they can continue to consume in the future (Modigliani & Brumberg, 1954; Bloom et al., 2003).

Factors that play a demanding role in saving decisions are lifetime resources, the way these lifetime resources are distributed, and age (Lusardi, 2007). Lifetime resources consist of all expected income until expected pension age, and of benefits of expected pension from expected pension age until death (Weiss, 2012). People who are young and facing an upward slanting age-salary profile will borrow money to steady their daily life. Accordingly, people who find the present important, will spend more money today than those who place high value on the future (Lusardi, 2007; Lusardi & Tufano, 2009). Research has also demonstrated that expectation about future income is one of the most important factors for saving decisions. For example, Arent (2012) showed that an increasing income expectation decreases the

savings in a household. And vice versa, if people expect to have a lower income in the future, their savings shall increase (Arent, 2012). Lifetime resources are important for saving. But what else, other than these lifetime resources, contribute to saving behavior?

In order to save money, an individual his or her self-control is important (Baumeister, 2002; Rha, Montalto, & Hanna, 2006). Self-control refers to the capacity for adjusting someone's responses, especially to bring them into line with standards such as social expectations, values, morals, ideals, and to support the pursuit of long-term goals (e.g., saving money for future expanses; Baumeister, Vohs, & Tice, 2007). Self-control makes it possible for a person to restrain or override a response, thereby making a different response possible. On the other hand, inadequate self-control has been linked to behavioral and impulse-control problems, including overeating, alcohol and drug abuse, crime and violence, smoking, sexually impulsive behavior, overspending, making disproportionate use of quick-access credit products, and being impatience (Tangney, Baumeister, & Boone, 2004; Vohs & Faber, 2007; Cheng, Shein, & Chiou, 2012; Gathergood, 2012). Lusardi (2001) showed that individuals who seem to have more patience indeed save more money than those who are not patient. Accordingly, Mischel (2014) demonstrated in his "marshmallow experiment" significant differences between children in their tendency to forego an immediate reward (consuming the marshmallow) for a larger, but delayed reward (consuming two marshmallows when the experimenter returned to the room). Research of Cronqvist and Siegel (2012) has shown that patience, as measured with the "marshmallow experiment", predict a series of important economic outcomes in further life. Concluding, individuals who are more patient, and have self-control to not directly eat the marshmallow, have better capability to save money (Cronqvist & Siegel, 2012). There are lots of individual differences, but how can we help people to save?

Using mental simulation to affect behavior

Mental simulation is the mental representation of some events or series of events (Taylor, Lien, Inna, & David, 1998). It can be considered as the cognitive construction of theoretical scenarios. These scenarios include rehearsal of future events that are likely to happen, fantasizing about less likely future events, and re-experiencing events that happened in the past or reconstructing past events (Taylor et al., 1998). Because mental simulation makes it possible to rerun past events, and to project diverse events that can happen in the future, mental simulation is important for interpreting those events (Escalas, 2004). By rerunning past events, and projecting future events, the similar physiological effects as the

actual experience may arise. For example, Hunt and Fanton (2010) showed that imagining the proximity of a live snake evoked the actual fear and avoidance of the snake and provokes corresponding neural activity as the actual experience (Christian, Parkinson, Miles, Macrae, & Wheatley, 2015).

In another study, Steinmetz, Tausen and Risen (2018) demonstrated that mental simulation can be used to simulate visceral states. The mental simulations appear to affect preferences and substitute for actual visceral experiences: participants who simulated being hungry chose bigger food portion sizes than participants who simulated being full. Also, the more hunger participants had, the bigger their elected food portions. Thus, by using mental simulations to imagine particular events, reasonable alternative realities are created which show the same neural networks as if the actual experience occurred (Steinmetz et al., 2018).

Social Psychologists Petrova and Cialdini (2004) demonstrated the effects of mental simulation and showed that mental simulation can lead to higher assessed probability estimations of simulated events. Accordingly, mental simulation can lead to attitude changes and changes in behavior (Petrova & Cialdini, 2004; Steinmetz et al., 2018). In particular if the mental simulation is repeated and relevant to the individual (Petrova & Cialdini, 2004). Concluding, mental simulation makes it feasible to help people to prepare for future preferences, and by that improve their decision-making (e.g., saving money for unspecific matters; Escalas, 2004).

The present research

The current study will test whether actively simulating being very poor or very rich might evoke the similar feelings as being in that situation and if this mental simulation affects people's saving behavior. If mental simulation can evoke a particular experience, in this case being very poor, these people should feel like they have less money than those who do not simulate this experience (Steinmetz et al., 2018). And, if an individual's current feelings predict preferences and behavior, mental simulation of being very poor should lead people to save more money, because they currently feel poorer (Arent, 2012; Steinmetz et al., 2018). Based on these findings, the first hypothesis is that when people mentally simulate being very poor (versus very rich or the control condition), their motivation to save money will increase. If this is the case, in the end, mental simulation may help people to make more precise predictions about others and themselves in different states (Steinmetz et al., 2018). For example, people who have a hard time saving money can follow courses about how to save money. And in these courses, mentally simulating being very poor can be used as a tool to

increase their saving behavior. Secondly, individuals with a higher level of self-control are more likely to save money (Baumeister et al., 2007; Cronqvist & Siegel, 2012). Based on these prior findings, a positive relation between self-control and saving behavior is expected. In other words, when self-control increases, a higher level of saving behavior is expected. Finally, when self-control acting as a moderator, I expect an interaction effect between mental simulation and self-control on saving behavior.

Method

Participants and Design

I recruited 153 ($n = 153$) participants ($M_{age} = 22.63$, $SD = 2.18$) of which 36 males ($M_{age} = 23.56$, $SD = 2.72$) and 117 females ($M_{age} = 22.45$, $SD = 1.91$) in exchange for a chocolate for a 3 (mental simulation: poor simulation versus rich simulation versus a control condition) between-subjects design. For each condition, the aim was a sample size of fifty participants based on power analysis of an estimated effect size of $d = 0.55$ and a desired power of .80 with an alpha level of .05 (Steinmetz et al., 2018). Both the poor simulation and the control condition contained 52 participants, the rich simulation condition consisted of 49 participants. All participants were Dutch students, aged from eighteen to thirty years old. Before participants took part in the study, they signed an informed consent. The informed consent can be found in Appendix A.

The independent variable is the manner of simulation: the mental simulation of being poor, the mental simulation of being rich, and the control condition. The dependent variable is the intention to save money. Self-control is the moderator variable.

Materials and Procedure

All materials were presented in Dutch. Participants were randomly assigned to either the poor simulation, the rich simulation, or the control condition, in which they had to imagine they are riding a bicycle. To simulate being poor, being rich or the control condition, participants read the following text (modeled after Steinmetz et al., 2018): “For the next 60 seconds, please imagine that you are very RICH and have a lot of money (versus being poor or the control condition). Please think about what it would be like to feel very rich in as much detail as possible. Think about what your experience would be like: What would you be thinking about? How would you act? How would you feel? Please try to give a detailed description of your thoughts and feelings.” During these 60 seconds, participants wrote about their thoughts and feelings. After 60 seconds passed, participants could either continue

writing, or proceed to the next part of the study.

Next, participants were asked to fill in the Spending and Saving Attitudes and Behaviors Questionnaire (Furnham, 1999), which measures people their spending and saving attitude and behavior. Participants read the following text: “In this questionnaire we want to ask you some questions about your behavior and attitudes in general. Based on how you are feeling right now, please indicate the answer that best applies to you.” The questionnaire consists of twenty 5-point (1 = totally disagree, 5 = totally agree) items (Likert scale). An example of an item is “When I save, it is usually because I want something special.” The Spending and Saving attitudes and Behaviors Questionnaire had a Cronbach’s alpha of .46. The entire questionnaire can be found in Appendix B.

Hereafter, participants were inquired to fill in the Brief Self-Control Scale (BSCS) (Tangney, Baumeister, & Boone, 2004), which focuses on processes that directly involve self-control (e.g. breaking a habit, working toward long-term goals). Participants read the following text: “In this questionnaire we want to ask you some questions about how you are in general. Based on how you are in general, please indicate the answer that best applies to you.” The BSCS exists of thirteen items rated on a 5-point Likert scale (1 = not at all like me, 5 = very much like me). An example of an item is: “I don’t keep secrets very well.” The BSCS was found to be highly reliable with a Cronbach’s alpha of .80. See Appendix C for the complete questionnaire.

To control, after participants completed both questionnaires, I asked them to what extent they could conceptualize the experience they had imagined (1 = not very vivid: there were no clear pictures in my mind, 5 = very vivid, there were very clear pictures in my mind). Accordingly, participants were asked to what extent they did engage with the imagination task (1= I did not engage at all, 5 = I was completely engaged). No differences in vividness and engagement between the three conditions were expected. Lastly, participants were asked to fill in their gender, age, and if their native language is Dutch.

Statistical Analyses

First, a factorial between groups analysis of variance (ANOVA) was performed to investigate whether there was a difference between the three conditions of mental simulation on saving behavior.

Secondly, a simple linear regression was used to calculate participants’ saving behavior based on their self-control.

Third, a moderation analysis (PROCESS) was performed to indicate if there was a

main effect of mental simulation on saving behavior and a main effect of self-control on saving behavior. Accordingly, the moderation analysis indicated if there was an interaction effect between mental simulation and self-control on saving behavior.

Finally, a one-way ANOVA indicated if the mental simulation condition had an effect on the vividness and the engagement items. Accordingly, another factorial between groups ANOVA was executed to test for the effect of mental simulation on saving behavior, including the control items (vividness and engagement) as covariates.

For the simple linear regression and moderation analysis, eight outliers were removed from the data. No further data were excluded from the analyses. All analyses were processed in IBM SPSS Statistics 25.

Results

A factorial between groups analysis of variance (ANOVA) was used to compare the saving behavior of three groups of participants: (a) participants imagining being very rich, (b) participants imagining being very poor, and (c) participants in the control group, and how their self-control affected this. To evaluate the assumptions of normality and homogeneity of variance, a Shapiro-Wilk and Levene's test were performed. The assumption of normality was not violated in the poor and control condition. However, the assumption of normality was violated in the rich condition ($p = .044$). For self-control, the assumption of normality was not violated. Additionally, the assumption of homogeneity of variance was not violated.

The ANOVA revealed that participants in the control condition ($M = 3.50$, $SD = .27$) did not significantly differ in saving behavior from participants who simulated being very poor ($M = 3.58$, $SD = .31$) and participants who simulated being very rich ($M = 3.52$, $SD = .30$), $t(150) = -.945$, $p = .346$, $d = -.15$. Likewise, participants simulated being very poor ($M = 3.58$, $SD = .31$) did not significantly differ from participants who simulated being very rich ($M = 3.52$, $SD = .30$), $t(150) = 1.086$, $p = .279$, $d = 0.18$. This was not in line with the first hypothesis.

A simple linear regression (SLR) was used to calculate participants' saving behavior based on their self-control. A moderation analysis tested whether there was a combined effect of mental simulation and self-control on saving behavior. Prior to interpreting the results of the SLR and the moderation analysis, several assumptions were evaluated. First, stem-and-leaf plots and boxplots indicated that each variable in the regression was normally distributed. Outliers were removed if their value was between 1.5 and 3 box lengths above or below the box boundaries (Allen & Bennett, 2012; Field, 2013). Eight outliers were excluded from the

data for the SLR and moderation analysis¹. Second, the normal probability plot of standardized residuals as well as the scatterplot of standardized residuals against standardized predicted values indicated that the assumptions of normality, linearity and homoscedasticity of residuals were met. Finally, Mahalanobis distance did not exceed the critical χ^2 for $df = 2$ (at $\alpha = .001$) of 13.82 for any cases (Allen & Bennett, 2012).

As expected in the second hypothesis, the SLR showed a significant positive relation between self-control and saving behavior $F(1, 143) = 10.097, p = .002$, with an R^2 of .066. Saving behavior increased as the level of self-control increased (see Figure 1).

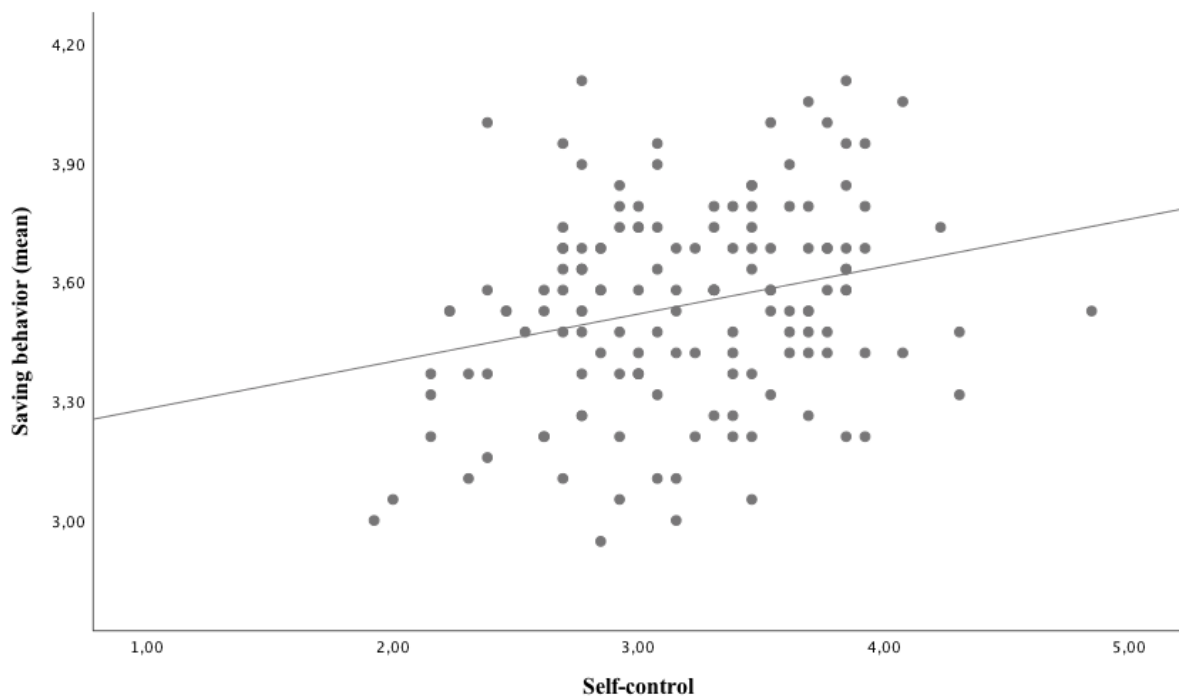


Figure 1. The level of self-control on saving behavior.

Moderation analysis indicated a significant positive main effect of self-control on saving behavior. The higher participants' self-control, the higher their saving behavior, $\beta =$

¹ When outliers included, a significant regression equation was found $F(1, 151) = 16,572, p < .001$, with an R^2 of .093. The moderation analysis showed a significant positive main effect of self-control on saving behavior $\beta = .168, SE = .044, t(149) = 3.800, p < .001, 95\% CI [0.081, 0.255]$. There was no main effect of condition on saving behavior, $\beta = .002, SE = .028, t(149) = .069, p = .945, 95\% CI [-0.054, 0.058]$. No interaction effect was found between mental simulation and self-control on saving behavior $\beta = -.004, SE = .054, t(149) = -.078, p = .938, 95\% CI [-0.110, 0.102]$.

.118, $SE = .039$, $t(141) = 3.060$, $p = .003$, 95% CI [0.042, 0.195]. No main effect of condition on saving behavior was found, $\beta = .016$, $SE = .024$, $t(141) = .681$, $p = .497$, 95% CI [-0.031, 0.064]. There was no interaction effect between mental simulation and self-control on saving behavior $\beta = -.048$, $SE = .044$, $t(141) = -1.095$, $p = .276$, 95% CI [-0.136, 0.039]. This was not in line with the third hypothesis.

Additionally, a one-way ANOVA was used to test whether the mental simulation condition had an effect on the vividness and the engagement items. The ANOVA revealed that the control condition ($M = 4.08$, $SD = .84$) did significantly differ from the poor ($M = 3.04$, $SD = 1.01$) and the rich ($M = 3.29$, $SD = .91$) condition on the vividness item, $t(150) = 5.810$, $p < .001$, $d = 0.95$. There was no significant difference between the poor ($M = 3.04$, $SD = 1.01$) and the rich ($M = 3.29$, $SD = .91$) condition on the vividness item, $t(150) = -1.346$, $p = .180$, $d = -.22$. On the engagement item, the control condition ($M = 4.08$, $SD = .84$) did significantly differ from the poor ($M = 3.04$, $SD = 1.01$) and the rich ($M = 3.29$, $SD = .91$) condition, $t(150) = 2.137$, $p = .034$, $d = 0.35$. No significant difference was found between the poor ($M = 3.04$, $SD = 1.01$) and the rich ($M = 3.29$, $SD = .91$) condition, $t(150) = -.463$, $p = .644$, $d = -.08$.

Finally, the effect of mental simulation on saving behavior including the vividness and the engagement items as covariates was analyzed. Neither the reported vividness of simulations, $F(6, 118) = .346$, $p = .911$, $\eta^2 = .017$, nor the reported engagement with the simulation task, $F(6, 118) = 1.258$, $p = .282$, $\eta^2 = .060$ affected saving behavior. The effect of mental simulation on saving behavior remained insignificant when including both covariates $F(5, 118) = 1.129$, $p = .349$, $\eta^2 = .046$.

Discussion

The current study aimed to answer the question whether a mental simulation of being very poor versus very rich might evoke the same feelings as the actual experience and if this mental simulation affects people's saving behavior. An unexpected finding was that participants who simulated being very poor scored somewhat (but not significant) higher on saving behavior than participants who simulated being very rich and the control condition, disconfirming the first hypothesis. Additionally, participants in the rich simulation scored slightly (but not significant) higher on saving behavior than participants in the control condition. Participants in the control condition were significant better able to mental simulate and were significant more engaged than participants in the poor and rich condition. Participants in the poor condition did not significantly differ on the vividness and engagement

item from participants in the rich condition. Prior research by Steinmetz and colleagues (2018) suggest that mental simulations require a detailed representation of the simulated event. In the current study, the mental simulation of being very poor and very rich might not have been detailed enough to find an effect of mental simulation on saving behavior. Another reason no effect was found might be the student sample that is not very rich neither very poor, for whom imagining being very rich or very poor might be too hard because it is not relevant to them (Petrova & Cialdini, 2004).

Next, the results demonstrate that there is a significant positive relation between self-control and saving behavior. When self-control increased, a higher level of saving behavior was found. This was in line with the second hypothesis and in accordance with prior research (Baumeister, 2002; Rha et al., 2006). For instance, Rha and colleagues (2006) demonstrated that saving behavior was strongly affected by mechanisms that help households practice self-control: people that had saving rules saved more than those that did not have saving rules.

In contrast, there was no main effect of mental simulation on saving behavior. Additionally, no interaction effect between mental simulation and self-control on saving behavior was found. In other words, participants' self-control did not moderate the effect of mental simulation on saving behavior. This was not in line with the third hypothesis. This discrepancy might be explained by the same argument as mentioned earlier, to successfully mental simulate an event, the mental simulation requires a detailed representation of that simulated event (Steinmetz et al., 2018). If the representation of the simulated event was not detailed enough, this might explain no interaction effect between mental simulation and self-control on saving behavior was found.

An important limitation to the current research should be mentioned. Namely, the Cronbach's alpha for the Spending and Saving Attitudes and Behaviors Questionnaire (Furnham, 1999) was .46. This can be considered as unacceptable for research purposes (Allen & Bennett, 2012). Due to limited time, I was not able repeat the study with a questionnaire having an acceptable Cronbach's alpha. In case I had more time, I would have repeated the study with a questionnaire containing a good (Cronbach's alpha higher than .70; Allen & Bennett, 2012) level of internal consistency. When looking at the questionnaire item-total statistics, alpha would increase to .50 if item 3 was removed. This item stated: "When I save, it is usually because I want something special." I chose not to remove item 3 from the questionnaire, because of the minor difference of Cronbach's alpha if not removed. Due to the translation, the interpretation of the items might be different in Dutch, resulting in a lower Cronbach's alpha than when presented in English (Cha, Kim, & Erlen, 2007). According to

Cha and colleagues (2007), vague terms should be avoided when designing a questionnaire. Furthermore, direct translations may not be required as long as the content and meaning in the translated version is the same as the original (Cha et al., 2007). Consequently, the items “I believe in putting some money aside for a rainy day” and “I wouldn’t be without a credit card” were not literally translated from English to Dutch, because the meaning of the sentence would be odd in Dutch. Therefore, the translations of these two items were adjusted to meaningful Dutch sentences to make them more understandable.

Despite the limitation concerning the Spending and Saving Attitudes and Behaviors Questionnaire (Furnham, 1999), one of the strengths of this study is the highly reliable Brief Self-Control Scale (Tangney et al., 2004), measuring participant’s self-control. The internal consistency of the BSCS can be considered as good for research purposes (Allen & Bennett, 2012). Likewise, self-reported self-control proves to be a valid measure (Schmeichel & Zell, 2007; Tangney et al., 2004). Another strength is the innovating topic of mental simulation on saving behavior, since the effect of mental simulation on saving behavior has been studied scarcely.

In contrast to Steinmetz and colleagues (2018), whose findings implicate that by using mental simulations – when detailed enough – people might be able to anticipate in their behavior in alternative states, the current study did not find an effect of mental simulation on saving behavior. Other mechanisms than mental simulation (e.g. priming effect; Dolan et al., 2012) could be taken in to account, to test for an effect on saving behavior. However, mental simulations might realize attitude changes (e.g. put some money aside every month instead of spending it on cigarettes, Petrova & Cialdini, 2004). This is an important implication, since mental simulations can be practically used to help people save money. For example, using mental simulation to show people with a gambling problem what it is like to have no money. Thereby changing their saving behavior towards saving more money and spending less money on gambling.

To my knowledge, the current study is one of the first studies that empirically tested the impact of mental simulation of different wealth levels on saving behavior. Future studies may be advised to replicate the current study in researching the effect of mental simulation of being very rich or very poor on saving behavior, by refining the current study on the basis of the current limitations. Namely, a pre-test should be done to test whether the mental simulations are detailed enough so that the same neural mechanisms that support action and perception are recruited. For example, after the mental simulation during the pre-test, participants could be asked to rate the imaginary experience on several dimensions related to

the mental simulation of being very poor or very rich. Specifically, participants could be asked to rate the extent to which images of being very poor or very rich came to mind (1 = not at all, 9 = to a great extent), the number of images that came to mind (1 = few or no images, 9 = lots of images), and to what extent they could imagine being very poor or very rich (1 = not at all, 9 = to a great extent). According to Elder and Krishna (2011), these three items can be used to form an “embodied mental simulation scale.” Once assured the mental simulations are detailed enough, an effect of mental simulation on saving behavior may be found.

Secondly, I would consider to establish a longer time period for such a research. Due to limited time, no other questionnaire for saving behavior could be used. Preferably, another questionnaire than the Spending and Saving Attitudes and Behaviors Questionnaire by Furnham (1999) was used, therewith a higher internal consistency.

Altogether, people with a high level of self-control are more likely to save money than those with a lower level of self-control. Additionally, earlier research suggests that mental simulation can substitute for actual experiences, if the mental simulation is detailed enough, and by that affect people’s current preferences and behavior (Escalas, 2004; Petrova & Cialdini, 2004; Steinmetz et al., 2018). As seen in the current research, mental simulation has no significant effect on saving behavior. However, by ensuring that participants have detailed mental simulations, people might experience what it feels like to be very poor or very rich. Thereby making more accurate predictions how this income would affect their behavior and choices in real life.

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Appendix A

Informed consent (translated to Dutch)

Als onderdeel van mijn masteropleiding Sociale Psychologie dien ik een onderzoek te doen, waar ik u voor uitnodig om deel te nemen. Dit formulier bevat belangrijke informatie over het onderzoek, wat we van u vragen indien u deelneemt aan het onderzoek, en de manier waarop de verkregen informatie wordt gebruikt.

Waarom doet u dit onderzoek?

U bent gevraagd om mee te doen aan een onderzoek over het verbeelden van een ervaring.

Wat moet ik doen als ik besluit mee te doen aan het onderzoek?

U zal worden gevraagd een ervaring voor te stellen. Hierna wordt u gevraagd een aantal vragen te beantwoorden.

Tijdsduur

Het onderzoek zal 10-15 minuten in beslag nemen.

Wat is het voordeel voor mij als deelnemer?

Er is voor u niet een direct voordeel. Dit onderzoek is om meer wetenschappelijke kennis en inzicht te krijgen in menselijk gedrag.

Hoe beschermt u de informatie die ik aan u geef?

De antwoorden op de vragen worden anoniem verwerkt doordat uw naam nergens ingevuld hoeft te worden. Hierdoor zullen de antwoorden ook nooit aan u terug te leiden zijn. De antwoorden zullen op groepsniveau worden bekeken. Als resultaten gepubliceerd of gepresenteerd worden, zullen er geen individuele namen of andere persoonlijke informatie worden gebruikt.

Wat zijn mijn rechten als participant?

Deelname aan het onderzoek is vrijwillig. U kunt op ieder moment, ongeacht de reden, stoppen met het onderzoek.

Wie kan ik om informatie vragen over het onderzoek?

Vincent Schilderman

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Appendix B

Spending and Saving Attitudes and Behaviors Questionnaire (translated to Dutch)

Het is belangrijk om geld te sparen.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helemaal mee oneens						Helemaal mee eens

Ik geef geld uit zodra ik het heb.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helemaal mee oneens						Helemaal mee eens

Ik denk dat ik geld opzij moet zetten voor wanneer ik een onvoorziene financiële tegenvaller heb.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helemaal mee oneens						Helemaal mee eens

Wanneer ik geld spaar, is dat gewoonlijk omdat ik iets speciaals wil kopen

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helemaal mee oneens						Helemaal mee eens

Ik ben geïnteresseerd in verschillende manieren om geld te sparen.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helemaal mee oneens						Helemaal mee eens

Ik probeer altijd om geld te sparen.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helemaal mee oneens						Helemaal mee eens

Geld is om uit te geven, niet om bij je te houden.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helemaal mee oneens						Helemaal mee eens

Af en toe houd ik ervan om flink geld uit te geven.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helemaal mee oneens						Helemaal mee eens

Ik betaal nooit voor iets als ik het ook met een afbetalingsregeling (lening) kan kopen.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helemaal mee oneens						Helemaal mee eens

Ik houd er niet van geld verschuldigd te zijn.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helemaal mee oneens						Helemaal mee eens

Veel geld hebben is nooit een doel geweest in mijn leven.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helemaal mee oneens						Helemaal mee eens

Het maakt me niet uit als ik niet veel geld heb.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helemaal mee oneens						Helemaal mee eens

Ik zou niets zonder een creditcard zijn.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helemaal mee oneens						Helemaal mee eens

Iedereen zou een bankrekening moeten hebben

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helemaal mee oneens						Helemaal mee eens

Moderne mensen gebruiken creditcards en cheques, geen cash.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helemaal mee oneens						Helemaal mee eens

Ik geloof dat geld verdienen iets voor mij is.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helemaal mee oneens						Helemaal mee eens

Zonder bankrekening kom je niet ver.

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helemaal mee oneens						Helemaal mee eens

Ik heb nooit genoeg geld.

Helemaal
mee
oneens

Helemaal
mee eens

Ik geloof niet dat ik ooit heel rijk zal worden.

Helemaal
mee
oneens

Helemaal
mee eens

Ik houd van winkelen.

Helemaal
mee
oneens

Helemaal
mee eens

Appendix C

Brief Self-Control Scale (translated to Dutch)

Ik ben goed in het weerstaan van verleidingen.

Helemaal niet Heel erg

Ik heb veel moeite slechte gewoonten te doorbreken.

Helemaal niet Heel erg

Ik ben lui.

Helemaal niet Heel erg

Ik zeg ongepaste dingen

Helemaal niet Heel erg

Ik doe bepaalde dingen die slecht voor me zijn, als ze leuk zijn.

Helemaal niet Heel erg

Ik weiger dingen die slecht voor me zijn.

Helemaal niet Heel erg

I zou willen dat ik meer zelfdiscipline had.

Helemaal niet Heel erg

Mensen zouden zeggen dat ik een ijzeren zelfdiscipline heb.

Helemaal niet Heel erg

Plezier en leuke dingen weerhouden me er soms van om mijn werk af krijgen.

Helemaal niet Heel erg

Ik vind het moeilijk om me te concentreren.

Helemaal niet Heel erg

Ik ben in staat om effectief te werken aan lange termijn doelen.

Helemaal niet Heel erg

Soms kan ik mijzelf er niet van weerhouden om iets te doen, zelfs als ik weet dat het verkeerd is.

Helemaal niet Heel erg

Ik handel vaak zonder na te denken over andere opties.

Helemaal niet Heel erg