

Money Giveth, Money Taketh Away: The Dual Effect of Wealth on Happiness

Jordi Quoidbach¹, Elizabeth W. Dunn², K.V. Petrides³,
and Moira Mikolajczak^{4,5}

¹University of Liège, ²University of British Columbia, ³University College London, ⁴Université Catholique de Louvain, and ⁵Belgian National Fund for Scientific Research, Brussels, Belgium

Psychological Science
 XX(X) 1–5
 © The Author(s) 2010
 Reprints and permission:
sagepub.com/journalsPermissions.nav
 DOI: 10.1177/0956797610371963
<http://pss.sagepub.com>


Abstract

This study provides the first evidence that money impairs people's ability to savor everyday positive emotions and experiences. In a sample of working adults, wealthier individuals reported lower savoring ability (the ability to enhance and prolong positive emotional experience). Moreover, the negative impact of wealth on individuals' ability to savor undermined the positive effects of money on their happiness. We experimentally exposed participants to a reminder of wealth and produced the same deleterious effect on their ability to savor as that produced by actual individual differences in wealth, a result supporting the theory that money has a causal effect on savoring. Moving beyond self-reports, we found that participants exposed to a reminder of wealth spent less time savoring a piece of chocolate and exhibited reduced enjoyment of it than participants not exposed to wealth. This article presents evidence supporting the widely held but previously untested belief that having access to the best things in life may actually undercut people's ability to reap enjoyment from life's small pleasures.

Keywords

money, savoring, happiness, positive emotion regulation

Received 7/7/09; Revision accepted 11/17/09

Can experiencing the best that life has to offer undermine one's ability to savor everyday joys? This question arises from one of the most puzzling findings in well-being research: that objective life circumstances explain little of the variance in individual happiness levels (Lyubomirsky, Sheldon, & Schkade, 2005). In particular, income appears to have a surprisingly modest impact on happiness (e.g., Aknin, Norton, & Dunn, 2009), especially in wealthy societies (Diener & Oishi, 2000; Veenhoven, 1991). Although a number of explanations have been proposed for the weakness of the money-happiness relationship (e.g., Dunn, Aknin, & Norton, 2008), one of the most intriguing—but untested—explanations lies in what Gilbert (2006) termed the *experience-stretching hypothesis*. According to this perspective, experiencing the best things in life—such as surfing Oahu's famous North Shore or dining at Manhattan's four-star restaurant Daniel—may actually mitigate the delight one experiences in response to the more mundane joys of life, such as sunny days, cold beers, and chocolate bars (Gilbert, 2006; Parducci, 1995).

Wealth, of course, opens the door to a wide range of experiences, from lattes and pedicures to fine dining and luxury travel. Indeed, just thinking about wealth may increase one's perceived access to such enjoyable experiences, introducing the risk that

everyday pleasures will be taken for granted. Consistent with this reasoning, research findings suggest that even subtle reminders of wealth can exert profound effects on thought and behavior. In particular, priming individuals with the concept of money or wealth appears to increase their feelings of self-sufficiency (Vohs, Mead, & Goode, 2006, 2008). In other words, merely thinking about money may lead people to believe that any experiences they desire are potentially obtainable. Unfortunately, such perceptions of abundance may run counter to the appreciation of pleasurable experiences. In one of the few studies on this topic, Kurtz (2008) found that college seniors derived greater happiness from the final weeks of college when they were led to feel that graduation was impending than when they thought of graduation as being very far off, which suggests that scarcity may increase savoring. Theorists describe savoring as a form of emotion regulation used to prolong and enhance positive emotional experiences (Bryant, 1989, 2003). Researchers have identified four common strategies—that can be employed

Corresponding Author:

Jordi Quoidbach, Personality and Individual Differences Unit, University of Liège, 5 Blvd. du Rectorat, 4000 Liège, Belgium
 E-mail: jquoidbach@ulg.ac.be

alone or in combination—to savor a positive event, including displaying positive emotions nonverbally, staying present in the moment, thinking about the event before and afterward, and telling others about the event (Tugade & Fredrickson, 2007; Quoidbach, 2009).

We hypothesized that savoring may be undermined by financial wealth, because of the abundance of pleasurable experience that wealth promises. To test this hypothesis, we carried out a preliminary study of wealth and savoring, and observed a significant negative correlation ($r = -.21$) between individuals' income and their self-reported savoring ability. In the experiments reported in this article, we attempted to replicate this finding, and also investigated the causal relationship between wealth and savoring. Because the ability to savor promotes happiness (Bryant, 1989, 2003; Bryant, Smart, & King, 2005; Meehan, Durlak, & Bryant, 1993; Quoidbach, 2009; Tugade & Fredrickson, 2007), we further hypothesized that the negative effect of wealth on savoring may counteract the other emotional benefits that money provides, thereby diminishing the positive correlation between money and happiness. Thus, in Study 1 we examined the association between wealth and savoring ability, and tested whether the positive relationship between wealth and happiness is undermined by the negative effect of wealth on savoring. In addition, we manipulated the salience of money to test whether reminders of wealth reduce self-reported savoring ability. To address an alternative causal path, we examined whether savoring ability reduces the desire to pursue wealth. In Study 2, we moved beyond self-report and tested whether thinking about money leads people to exhibit reduced savoring behavior when presented with one of the small pleasures of daily life.

Study 1

Method

Participants. We recruited 374 adult employees of the University of Liège, from custodial staff to senior administrators, for an online survey. Twenty-three participants declined to answer money-related questions, which left a total of 351 participants (66% females, 34% males; ages 21–89 years, $M = 37.9$ years, $SD = 12.9$).

Procedure. To test whether thinking about money has a causal impact on savoring, we randomly assigned participants to a money prime or a control condition. In the prime condition, the questionnaire displayed a photograph of a large stack of euro bills—a mental priming technique that has been used successfully in other studies (Vohs et al., 2006, 2008) to increase accessibility of the concept of money at a level below awareness. In the control condition, the same photograph on the questionnaire was blurred beyond recognition. The questionnaire included items measuring savoring ability, happiness, desire for future wealth, and current wealth (in that order).

Measures

Savoring. Participants completed the Emotion Regulation Profile-Revised, a vignette-based instrument measuring individuals' typical ability to regulate both negative and positive emotions. This measure has good psychometric properties, including strong convergent, divergent, and predictive validity (Nelis, Quoidbach, Hansenne, & Mikolajczak, in press; see also Quoidbach, Berry, Hansenne, & Mikolajczak, in press). Of interest in the present study was the Savoring Positive Emotion Scale, which includes six detailed descriptions of situations that elicit contentment, joy, awe, excitement, pride, and gratitude. For example, participants are asked to imagine finishing an important task (contentment), spending a romantic weekend away (joy), or discovering an amazing waterfall while hiking (awe). Each scenario is followed by eight possible reactions, including the four savoring strategies referred to in the introduction (i.e., displaying positive emotions, staying present, anticipating or reminiscing about the event, and telling other people about the experience). Participants are required to select the response or responses that best characterize what their typical behavior in each situation would be, and receive 1 point for each savoring strategy selected. Participants' scores across the different scenarios are then aggregated into an overall savoring score ($\alpha = .83$).

Happiness. We assessed participants' global subjective happiness using the well-validated Subjective Happiness Scale (Lyubomirsky & Lepper, 1999), which includes four 7-point items ($\alpha = .84$).

Desire for wealth. Two open-ended items asked participants to indicate their ideal income and how much money they would need to win in a hypothetical lottery in order to live the life of their dreams, allowing us to assess whether savoring ability was related to desire for wealth.

Current wealth. We asked participants to report their life savings on a 7-point scale, ranging from 1 (*under €1,000*) to 7 (*over €75,000*), as well as to report their monthly income after taxes. Responses on these items, which were positively correlated ($r = .38, p < .001$), were standardized and aggregated to create an overall wealth index.

Results

Current wealth, money prime, and savoring. To test whether wealth and the money prime produced similar, deleterious effects on savoring, we entered participant's current wealth index and experimental condition into a regression predicting savoring scores. We found that participants' wealth significantly predicted lower ability to savor positive emotions, $\beta = -0.17, t(348) = 3.18, p < .01$, which was consistent with our hypothesis. Similarly, in comparison to the control group, participants assigned to the money-prime condition exhibited significantly lower savoring scores, $\beta = -0.11, t(348) = 1.99, p < .05$. Thus, both individual differences in wealth and a situational prime designed to increase thoughts of wealth produced

similar negative effects, suggesting that thinking about wealth plays a causal role in impairing savoring.

Savoring and desire for wealth. To test an alternative causal pathway—that savoring increases contentment with one’s existing situation, reducing one’s desire to pursue money—we entered savoring ability scores into regressions predicting participants’ desired incomes and lottery winnings.¹ We found that savoring ability did not predict either desired income, $\beta = -0.08$, $t(333) = 1.47$, $p = .14$, or lottery winnings, $\beta = 0.08$, $t(302) = 1.37$, $p = .17$.

Current wealth, savoring, and happiness. To investigate how wealth and savoring relate to happiness, we first entered savoring ability into a regression predicting happiness, controlling for experimental condition. We found that savoring ability positively predicted happiness ($\beta = 0.34$, $p < .001$), a result consistent with past research (e.g., Bryant, 2003; Quidbach et al., in press). We conducted another regression analysis replacing savoring ability with wealth, and found a modest, but reliable relationship between wealth and happiness ($\beta = 0.12$, $p < .03$), which was also consistent with previous research (e.g., Aknin et al., 2009). Because wealth was negatively related to savoring (as discussed in the previous section) and savoring was positively related to happiness, we tested whether savoring suppresses the relationship between wealth and happiness. A suppressor is defined as “a variable which increases the predictive validity of another variable . . . by its inclusion in a regression equation” (Conger, 1974, p. 36). Following the recommendations of MacKinnon, Krull, and Lockwood (2000), we performed mediation analyses to determine whether the effect of wealth on happiness was weakened by the ability to savor positive emotion (Baron & Kenny, 1986). As shown in Figure 1, when we included savoring ability with wealth in a regression predicting happiness, wealth became a stronger predictor of happiness ($\beta = 0.18$, $p < .001$). We performed a Sobel test, and confirmed that savoring ability suppressed the relationship between wealth and happiness ($z = 2.91$, $p < .01$).

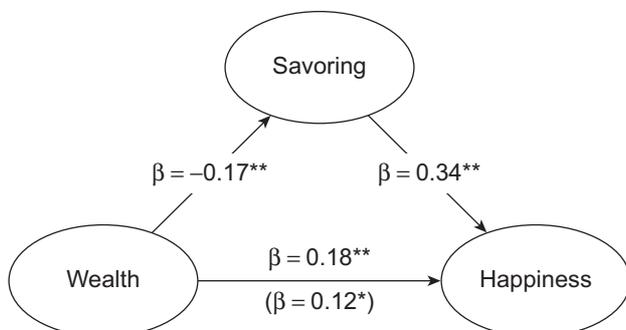


Fig. 1. Results of regression analyses testing the suppressing effect of savoring in the relationship between wealth and happiness (* $p < .05$, ** $p < .01$). The effect of wealth on happiness when savoring was not included in the model is indicated in parentheses.

Discussion

Our results from Study 1 support the hypothesis that wealth may impair savoring; individual differences in wealth and a situational reminder of wealth produced similar deleterious effects on participants’ ability to savor. Conversely, we also found that participants’ ability to savor positive emotions was unrelated to their desire for wealth. These findings further demonstrate that the emotional benefits of wealth are undermined by the negative impact of wealth on savoring; when we controlled for savoring ability, the relationship between wealth and happiness increased significantly. Thus, wealth may fail to deliver the happiness one might expect because of its detrimental consequences for savoring. However, given the long-standing debates regarding the extent to which people can be accurately aware of their own emotion-regulation styles (e.g., Salovey & Grewal, 2005), we sought to replicate our central finding—that wealth reduces savoring—using a behavioral measure of savoring. As we found that the wealth prime produced the same effect as actual wealth on savoring in Study 1, while permitting causal inferences, we also used priming to investigate whether wealth reminders could produce observable variations in savoring one of life’s small delights: chocolate.

Study 2 Method

Participants. Forty participants (57% females, 43% males; ages 16–59 years, $M = 23.0$ years, $SD = 7.5$) on the University of British Columbia campus volunteered for a taste-test study.

Procedure. Participants completed a brief questionnaire that requested their demographic information and assessed their attitudes toward chocolate. The questionnaire was presented to each participant in a binder, and the adjacent page showed materials from an “unrelated study,” including a picture of Canadian money or a neutral photo. Next, participants were instructed to eat a piece of chocolate and, when ready, to complete a brief follow-up questionnaire.

Behavioral measures of savoring. Two observers (who were blind to condition) surreptitiously watched each participant eating the chocolate. Because savoring food entails staying present in the moment, and taking the time to appreciate and reap pleasure from it (Macht, Meiner, & Roth, 2005), we asked the observers to measure the amount of time participants spent eating the chocolate (using stopwatches). To capture the extent to which participants displayed positive emotions while eating, observers also rated how much enjoyment participants displayed, on a scale from 1 (*not at all*) to 7 (*a great deal*). Given that observers showed high correspondence in their measurements of participants’ eating time ($r = .99$, $p < .01$) and

ratings of enjoyment ($r = .71, p < .01$), their scores were averaged.

Results and discussion

Because females spent significantly more time savoring the chocolate than males did ($\beta = 0.53, p < .01$), we conducted analyses of covariance comparing participants' eating time and enjoyment between conditions, controlling for gender, as well as baseline attitudes toward chocolate. In comparison with participants in the control condition, those in the money-prime condition spent significantly less time eating the chocolate, $F(1, 31) = -6.02, p = .02$, and displayed significantly less enjoyment, $F(1, 35) = 9.85, p < .01$ (see Table 1). Thus, a simple reminder of wealth undermined participants' ability to savor the pleasurable experience of eating chocolate, as they devoted less time to eating it and exhibited lower levels of enjoyment of the experience.

General Discussion

This research provides the first evidence that money interferes with people's ability to savor positive emotions and experiences. In a large sample of working adults, we found that wealthier individuals reported lower savoring ability. Indeed, the negative impact of money on savoring undercut other emotional benefits provided by money. We found that experimentally exposing participants to a reminder of wealth produced the same negative effect on savoring as actual wealth did, a result supporting the notion that money causally influences savoring. Moving beyond self-report, we observed that a reminder of wealth led participants to devote less time to savoring a piece of chocolate and to exhibit reduced enjoyment from this small pleasure of everyday life.

Thus, we found converging evidence for our hypothesis using (a) a broad self-report measure, which assessed the use of four savoring strategies across six different scenarios, and (b) a more focused behavioral measure of savoring that captured the extent to which participants stayed present and displayed positive emotion to prolong and enhance the experience of eating chocolate. Our behavioral measure was not designed to capture the interpersonal or intertemporal components of savoring, and it would therefore be interesting to test whether wealth produces observable differences in the extent to which people reminisce and tell other people about their positive experiences.

Table 1. Measures of Savoring in the Two Conditions of Study 2

Condition	Time eating (seconds)		Observers' rating of enjoyment	
	Mean	SD	Mean	SD
Money prime	32.0	14.4	3.6	1.2
Control	45.4	29.0	5.0	1.2

Taken together, our findings provide evidence for the provocative and intuitively appealing—yet previously untested— notion that having access to the best things in life may actually undermine one's ability to reap enjoyment from life's small pleasures. Moving beyond past theorizing, our research demonstrates that a simple reminder of wealth produces the same deleterious effects as actual wealth on an individual's ability to savor, suggesting that perceived access to pleasurable experiences may be sufficient to impair everyday savoring. In other words, one need not actually visit the pyramids of Egypt or spend a week at the legendary Banff spas in Canada for one's savoring ability to be impaired—simply knowing that these peak experiences are readily available may increase one's tendency to take the small pleasures of daily life for granted.

This perspective is consistent with the intriguing theoretical notion that hedonic adaptation may occur not only in response to past experiences, but also in response to anticipated future experiences (Frederick & Loewenstein, 1999). Regarding past experiences, research has begun to examine individual differences in the extent to which memories of the past can either enhance or diminish joy in the present (Lieberman, Boehm, Lyubomirsky, & Ross, 2009). Thus, an important research goal lies in delineating when, how, and for whom awesome life experiences—in the past and future—shape the extent to which individuals savor diverse pleasures in the present.

Our findings also contribute to a new wave of research on money and happiness; whereas a great deal of previous research focused on documenting the magnitude of the relationship between money and happiness (see Diener & Biswas-Diener, 2002, for a review), researchers are increasingly moving toward examining when and why money promotes happiness, in order to understand their surprisingly weak connection (e.g., Dunn, Aknin, & Norton, 2008; Van Boven, 2005). Our studies provide a novel contribution by demonstrating that the emotional benefits that money gives with one hand (i.e., access to pleasurable experiences), it takes away with the other by undercutting the ability to relish the small delights of daily living.

Acknowledgments

We would like to thank Dan Gilbert.

Declaration of Conflicting Interests

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

Funding

The French Community of Belgium (Grant ARC 06/11-340) and the Social Sciences and Humanities Research Council of Canada supported this research.

Note

1. Given the significant effect of the money-prime manipulation, all subsequent analyses were computed controlling for experimental condition.

References

- Aknin, L.B., Norton, M.I., & Dunn, E.W. (2009). From wealth to well-being? Money matters, but less than people think. *Journal of Positive Psychology, 4*, 523–527.
- Baron, R.M., & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173–1182.
- Bryant, F.B. (1989). A four-factor model of perceived control: Avoiding, coping, obtaining, and savoring. *Journal of Personality, 57*, 773–797.
- Bryant, F.B. (2003). Savoring Beliefs Inventory (SBI): A scale for measuring beliefs about savoring. *Journal of Mental Health, 12*, 175–196.
- Bryant, F.B., Smart, C.M., & King, S.P. (2005). Using the past to enhance the present: Boosting happiness through positive reminiscence. *Journal of Happiness Studies, 6*, 227–260.
- Conger, A.J. (1974). A revised definition for suppressor variables: A guide to their identification and interpretation. *Educational and Psychological Measurement, 34*, 35–46.
- Diener, E., & Biswas-Diener, R. (2002). Will money increase subjective well-being? *Social Indicators Research, 57*, 119–169.
- Diener, E., & Oishi, S. (2000). Money and happiness: Income and subjective well-being across nations. In E. Diener & E.M. Suh (Eds.), *Subjective well-being across cultures* (pp. 185–219). Cambridge, MA: MIT Press.
- Dunn, E.W., Aknin, L., & Norton, M.I. (2008). Spending money on others promotes happiness. *Science, 319*, 1687–1688.
- Frederick, S., & Loewenstein, G. (1999). Hedonic adaptation. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 302–329). New York: Russell Sage Foundation.
- Gilbert, D. (2006). *Stumbling on happiness*. New York: Knopf.
- Kurtz, J. (2008). Looking to the future to appreciate the present: The benefits of perceived temporal scarcity. *Psychological Science, 19*, 1238–1241.
- Liberman, V., Boehm, J.K., Lyubomirsky, S., & Ross, L.D. (2009). Happiness and memory: Affective significance of endowment and contrast. *Emotion, 9*, 666–680.
- Lyubomirsky, S., & Lepper, H.S. (1999). A measure of subjective happiness: Preliminary reliability and construct validation. *Social Indicators Research, 46*, 137–155.
- Lyubomirsky, S., Sheldon, K.M., & Schkade, D. (2005). Pursuing happiness: The architecture of sustainable change. *Review of General Psychology, 9*, 111–131.
- Macht, M., Meiningner, J., & Roth, J. (2005). The pleasures of eating: A qualitative analysis. *Journal of Happiness Studies, 6*, 137–160.
- MacKinnon, D.P., Krull, J.L., & Lockwood, C.M. (2000). Equivalence of the mediation, confounding and suppression effect. *Prevention Science, 1*, 173–181.
- Meehan, M., Durlak, J., & Bryant, F.B. (1993). The relationship of social support to positive life events and subjective mental health in adolescents. *Journal of Community Psychology, 21*, 49–55.
- Nelis, D., Quoidbach, J., Hansenne, M., & Mikolajczak, M. (in press). Measuring individual differences in emotion regulation: The Emotion Regulation Profile-Revised (ERP-R). *Psychologica Belgica*.
- Parducci, A. (1995). *Happiness, pleasure and judgment: The contextual theory and its applications*. Mahwah, NJ: Erlbaum.
- Quoidbach, J. (2009). La régulation des émotions positives [Positive emotion regulation]. In M. Mikolajczak, J. Quoidbach, I. Kotsou, & D. Nélis (Eds.), *Les compétences émotionnelles* [Emotional competences] (pp. 193–219). Paris: Dunod.
- Quoidbach, J., Berry, E.V., Hansenne, M., & Mikolajczak, M. (in press). Positive emotion regulation and well-being: Comparing the impact of eight savoring and dampening strategies. *Personality and Individual Differences*.
- Salovey, P., & Grewal, D. (2005). The science of emotional intelligence. *Current Directions in Psychological Science, 14*, 281–285.
- Tugade, M., & Fredrickson, B. (2007). Regulation of positive emotions: Emotion regulation strategies that promote resilience. *Journal of Happiness Studies, 8*, 311–333.
- Van Boven, L. (2005). Experientialism, materialism, and the pursuit of happiness. *Review of General Psychology, 9*, 132–142.
- Veenhoven, R. (1991). Is happiness relative? *Social Indicators Research, 24*, 1–34.
- Vohs, K.D., Mead, N.L., & Goode, M.R. (2006). The psychological consequences of money. *Science, 314*, 1154–1156.
- Vohs, K.D., Mead, N.L., & Goode, M.R. (2008). Merely activating the concept of money changes personal and interpersonal behavior. *Current Directions in Psychological Science, 17*, 208–212.