Slumdog Millionaire: money and happiness beyond movies

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Abstract: This study answers the question for whom, how, and why money would predictively and reportedly buy happiness. Financial novices and experts were asked whether an increasing, constant, or decreasing payments plan of a one million dollars prize would make them happier. They were also asked why, and what would they spend the money on. The findings suggest that money would buy happiness in constant payments for novices vis-à-vis their mental accounting of a better distribution of money and/or management of expenses, and in decreasing payments for experts vis-à-vis their financial accounting of the better present value of money and future return of investments.

Keywords: happiness; money; novices; experts; mental accounting; financial accounting; money distribution; present value; expense management; investment returns.


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1 Introduction

Some say that life imitates art (Wilde, 1889). They may be right. Just like in the motion picture Slumdog Millionaire (Coision and Boyle, 2008), a poor Indian recently really won one million dollars on a gameshow (Burke and Bhattacharya, 2011), which made not only him happy as recounted by the show’s host: “The family of Sushil Kumar, the contestant, not prone to any kind of public jubilation ran on to the set in uncontrollable joy and tears and screams of happiness” (Bachchan, 2011). Noticeably, a year after, he has spent just a fifth of the money on basic goods and family debts, and saved the rest (Vaidyanathan, 2012). In fact, he has done exactly what he said he would: “Kumar said he would buy a new home for his wife and pay off his parents’ debts” (Burke and Bhattacharya, 2011). Moreover, when asked why he has not spent the money extravagantly, he replies: “Slowly, slowly, I’m spending my money carefully” (Vaidyanathan, 2012).

Interestingly enough, college students would predictively and reportedly do the same (López-Rousseau and Cortés, 2010): When asked to imagine they would win a one million dollars prize payable in five yearly payments, and to choose which of three payment plans – increasing, constant, or decreasing – would make them happier, most chose constant payments vis-à-vis their mental accounting of a better management of expenses. Moreover, the majority said they would spend the money on basic goods and family matters, versus the minority who would do it on luxuries, mostly travelling.

These findings suggest that money would make people happier in constant payments vis-à-vis their mental accounting of a better management of expenses (López-Rousseau and Cortés, 2010). They would thus falsify a mathematical economic model which states that money would make people happier in increasing spending on basic goods (Baucells and Sarin, 2008). More importantly, they would contradict the financial accounting model which suggests that money would make people happier in decreasing payments vis-à-vis the better present value of money (Drake and Fabozzi, 2009).

Interestingly again, the college students were all social science (SS) majors very much like the poor contestant. That is, financial novices. This begs the question if financial experts – e.g., business administration (BA) masters – would predictively and reportedly do the same given their knowledge of money’s financial value. Would money make financial experts happier in constant payments vis-à-vis their mental accounting of a better management of expenses, or in decreasing payments vis-à-vis their financial accounting of the better present value of money? The present study answers this question by replicating López-Rousseau and Cortés’ (2010) method exactly, except for the sample which was precisely designed to test differences between financial novices and experts regarding money and happiness.

Although the present study’s rationale and hypotheses are original, its replicated method additionally answers a call for direct instead of conceptual replications – to restore confidence in psychological research – made by the editors of a recent special issue of perspectives on psychological science on the replicability crisis in psychology (Pashler and Harris, 2012). As a matter of fact, just 0.15% of the articles published since 1900 in the 100 psychology journals with the highest 5-year impact factors are direct replications that actually follow the original method (Makel et al., 2012). This study represents a timely addition to that exception.
There are two views on whether money makes people happier (López-Rousseau and Cortés, 2010). To some, the money-happiness relationship is monotonic: People get happier as they get richer (Frey, 2008; Stevenson and Wolfers, 2008). To others, non-monotonic: People get happier as they get richer but only to a point beyond which people do not get happier as they get richer (Easterlin, 2005; Kahneman et al., 2006). However to all, money makes people happier, at least at first.

The non-monotonic and prevalent view is the so-called Easterlin paradox (Easterlin, 2005). Easterlin found that people’s average life satisfaction increases as their countries’ gross domestic income (GDI) per capita increases. Paradoxically though, life satisfaction does not increase beyond a certain GDI. That is, people of poor countries get happier as they get richer, but once they are rich, they do not get happier as they get richer. Later, Stevenson and Wolvers (2008) found that there is apparently no GDI limit to increases in life satisfaction, which in any case would only add to the view that money makes people happier (López-Rousseau and Cortés, 2010).

Recently, Baucells and Sarin (2008) proposed a model based on individual adaptation, social comparison and biased projection that would explain the Easterlin paradox. To them, people do not get happier as they get richer because they adapt to being rich, compare themselves to richer people and over project their present richness. Consequently, people overrate money’s impact on happiness, overspend at first, and do so on luxuries. Contrarily, people would indeed get happier as they get richer by spending money at increasing rates and on basic goods. In short, the expected utility of expanding consumption would be maximised (López-Rousseau and Cortés, 2010).

López-Rousseau and Cortés’ (2010) findings would empirically falsify Baucells and Sarin’s (2008) model by showing that people would get happier as they get richer by spending money at constant rates because of better expense management on basic goods. More importantly, their findings would also contradict the financial accounting model which predicts and prescribes that people would get happier as they get richer by spending money at decreasing rates on financial investments because of the better present value of money. But this may be due to all of their participants being SS majors, i.e., most probably novices on financial matters. What about experts on financial matters like money’s present value? Should they not act according to the accounting financial model? We believe they should.

The following study addresses this issue by asking financial novices and experts whether spending money at increasing, decreasing or constant rates would make them happier. Given that financial experts should presumably know better, our three hypotheses are the following:

Hypothesis 1 Whereas financial novices will choose constant payments, financial experts will choose decreasing payments.

Hypothesis 2 Whereas financial novices will choose constant payments because of a better management of expenses, financial experts will choose decreasing payments because of the better present value of money.

Hypothesis 3 Whereas financial novices will firstly spend money on basic goods, financial experts will firstly spend money on financial investments.
Corollary: Both financial novices and experts will spend money on luxuries only secondarily.

López-Rousseau and Cortés (2010) claim that culture and society are possible for people to say what they mean, and to do what they say. Thus, it is more probable than not that people would use the same spending strategies in real and imagined worlds. Kumar is a case in point. In economics, preferences and choices are actually equated, as preferences are regarded as hypothetical choices, and choices as revealed preferences. An example is election surveys and results which consistently show that stated preferences are valid indicators of actual choices. Consequently, most decision-making studies use counterfactual scenarios like this study (e.g., Swann et al., 2010).

Wilson and Gilbert’s (2003) affective forecasting review concludes that people are accurate at predicting the valence and specificity of their future emotional reactions, but less at predicting their intensity and duration. For example, “Without exception, all forecasters estimated that they would be in a better mood if they won than if they lost, and indeed, experiencers who won were, on average, in a better mood than experiencers who lost” (Wilson and Gilbert, 2003). Thus, it is more probable than not that people would be accurate at predicting whether money would make them happy.

Nonetheless, this study is not about actual money and happiness but potential money and happiness. Like many other studies, happiness is not presently measured but predictively reported, and money is not real but imagined. Consequently, these results and findings should be taken with the proviso that it is possible – although not probable – that real and imagined worlds are totally different.

2 Method

Except for the sample, this study replicated López-Rousseau and Cortés’ (2010) method exactly, thus its method will be reworded almost exactly. More specifically, 98 volunteers (57 women and 42 men) properly informed and protected participants took part in this study conducted in Spanish at Santiago de Chile. Thirty-five were third-semester students of SSs at the Pontificia Universidad Católica (\(M_{\text{age}} = 20, \text{range} = 18 \text{ to } 25\)), 36 were second-semester students of BA at the Universidad Andrés Bello (\(M_{\text{age}} = 19, \text{range} = 18 \text{ to } 24\)), and 27 were second-semester students of a Master in Business Administration (MBA) at the Universidad Adolfo Ibañez (\(M_{\text{age}} = 39, \text{range} = 29 \text{ to } 55\)). A typewritten page contained the instructions and items for the participants who responded on it individually and privately along with their classmates in a classroom during a class hour of their study programmes (López-Rousseau and Cortés, 2010).

Participants were asked to imagine they would win a one million dollars prize payable in five yearly payments, and to choose which of three payment plans – increasing, constant, or decreasing – would make them happier. Each plan corresponds to one of the spending strategies above (López-Rousseau and Cortés, 2010). Notice that the prize cannot be paid and spent all at once or otherwise, which could make some even happier.
Figure 1 Yearly payments by payment plan

Figure 1 illustrates the yearly payments by payment plan (see Figure 1). The increasing payments plan would pay them 100, 150, 200, 250, and 300 thousand dollars yearly. The constant payments plan would pay them 200, 200, 200, 200, and 200 thousand dollars yearly. And the decreasing payments plan would pay them 300, 250, 200, 150, and 100 thousand dollars yearly. The three payment plans were presented in a table, and their order was counterbalanced across participants to avoid primacy or recency effects. The plans were also labelled A, B and C from first to last to avoid positive or negative semantic effects (López-Rousseau and Cortés, 2010). Hypothesis 1 would be confirmed if financial novices choose the constant payment plan, whereas financial experts choose the decreasing payment plan.

In addition, participants were asked why the chosen payment plan would make them happier in order to gain some insight into the motives and reasons of their choice (López-Rousseau and Cortés, 2010). Hypothesis 2 would be confirmed if financial novices choose the constant payment plan because of a better management of expenses, whereas financial experts choose the decreasing payment plan because of the better present value of money.

And participants were also asked what would they spend the money on in order to gain some insight into the nature of their spending (López-Rousseau and Cortés, 2010). Hypothesis 3 would be confirmed if financial novices would firstly spend money on basic goods, whereas financial experts would firstly spend money on financial investments. Finally, the corollary would be confirmed if both financial novices and experts would spend money on luxuries only secondarily.

The questionnaire read as follows (López-Rousseau and Cortés, 2010).

The purpose of this questionnaire is to explore the relationship between money and happiness. To this end, briefly answer the three following questions, please. Thanks. Imagine you would win a 1 million dollars prize payable in five yearly payments.
1. What payment plan would make you happier? Please answer by checking plan A, B or C in the table below, which shows the yearly payments in thousands of dollars that you would be paid in each case.

**Table 1** Yearly payments by payment plan

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan A</td>
<td>100</td>
<td>150</td>
<td>200</td>
<td>250</td>
<td>300</td>
<td>1,000</td>
</tr>
<tr>
<td>Plan B</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>1,000</td>
</tr>
<tr>
<td>Plan C</td>
<td>300</td>
<td>250</td>
<td>200</td>
<td>150</td>
<td>100</td>
<td>1,000</td>
</tr>
</tbody>
</table>

2. Why? Please answer below.

3. What would you spend the money on? Please answer below.

After all participants answered the questionnaire, they were properly debriefed about the study.

### 3 Results and discussion

Table 2 shows the number of participants in each study programme that chose each payment plan (see Table 2). Whereas the minority of SS, BA and MBA students chose the increasing payment plan (20%, 17% and 4%, respectively), the majority of both SS and BA students chose the constant payment plan (66% and 61%, respectively), and the majority of MBA students chose the Decreasing Payment plan (70%), $\chi^2 (4, N = 98) = 24.88, p < 0.0001$. In fact, while three in four SS and BA students chose constant over decreasing payments, three in four MBA students chose decreasing over constant payments.

**Table 2** Participants by study programme and payment plan

<table>
<thead>
<tr>
<th></th>
<th>Constant</th>
<th>Decreasing</th>
<th>Increasing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social science</td>
<td>23</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Business admin</td>
<td>22</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Master in b.</td>
<td>7</td>
<td>19</td>
<td>1</td>
</tr>
</tbody>
</table>

These results confirm our first hypothesis only partially as unexpectedly BA students do not behave as financial experts like MBA students but as financial novices just like SS students. Although factors other than financial education may be at stake (e.g., age difference), most probably only two semesters of BA education do not turn a financial novice into a financial expert as assumed. Thus, BA and SS students were regrouped as financial novices. As expected now, whereas financial novices (SS and BA students) choose constant payments indeed, financial experts (MBA students) do not, they choose decreasing payments instead. In sum, these results suggest that while money would predictively and reportedly make financial novices happier when paid in constant payments, money would make financial experts happier when paid in decreasing payments.
Table 3  Participants by financial expertise and plan reason

<table>
<thead>
<tr>
<th></th>
<th>Value of money/return of investments</th>
<th>Distribution of money/management of expenses</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial novices</td>
<td>0</td>
<td>45</td>
<td>0</td>
</tr>
<tr>
<td>Financial experts</td>
<td>16</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

As for why, these results confirm our second hypothesis now fully. Table 3 shows the reason for choosing a plan by financial expertise (see Table 3). As expected, whereas all the financial novices who chose constant payments (100%) justified it by a balanced distribution of money and/or better management of expenses (e.g., Because I create a sort of stable pattern in my expenses), the majority of the financial experts who chose decreasing payments (84%) justified it by the better present value of money and/or future return of investments (e.g., Because I take into account the value of money in time), $\chi^2 (2, N = 64) = 64, p < 0.001$. Therefore, these results also suggest that while money would predictively and reportedly make financial novices happier when paid in constant payments vis-à-vis their mental accounting of a balanced distribution of money and/or better management of expenses, money would make financial experts happier when paid in decreasing payments vis-à-vis their financial accounting of a better present value of money and/or future return of investments.

Table 4  Participants by financial expertise and primary spending

<table>
<thead>
<tr>
<th></th>
<th>Investments/business</th>
<th>Debts/goods</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial novices</td>
<td>5</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Financial experts</td>
<td>11</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

And as for what they would spend the money on, these results confirm our third hypothesis also fully. Table 4 shows the primary spending by financial expertise (see Table 4). As expected, given their first unique answer, whereas the majority of the financial novices who chose constant payments (44%) would spend money on debts and/or goods – mostly family debts and basic goods, the majority of the financial experts who chose decreasing payments (58%) would spend money on investments and/or business – mostly real estate and startups, $\chi^2 (2, N = 64) = 15.9, p < 0.001$. And last but not least, these results confirm our corollary, fully too. Table 5 shows the secondary spending by financial expertise (see Table 5). As expected, given their final unique answer, both financial novices who chose constant payments (33%) and financial experts who chose decreasing payments (47%) would spend money on luxuries – mostly travelling, $\chi^2 (1, N = 64) = 1.12$, n.s. These results thus suggest that while money would predictively and reportedly make financial novices happier when firstly spent on debts and/or goods, money would make financial experts happier when firstly spent on investments and/or business. And that money would make both financial novices and financial experts happier when spent on luxuries only secondarily.

Table 5  Participants by financial expertise and secondary spending

<table>
<thead>
<tr>
<th></th>
<th>Luxuries</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial novices</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Financial experts</td>
<td>9</td>
<td>10</td>
</tr>
</tbody>
</table>
Regarding replicability, these results fully replicate López-Rousseau and Cortés’ (2010) findings with SS majors, namely, they again chose constant payments because of better expense management on basic goods. This strongly suggests that both these and those findings are not just significant but also reliable and valid.

In sum, these findings mainly suggest that money would predictively and reportedly buy happiness in constant payments for novices vis-à-vis their mental accounting of a better distribution of money and/or management of expenses, and in decreasing payments for experts vis-à-vis their financial accounting of the better present value of money and future return of investments. Apparently, financial expertise would change the way money makes people happier. Nonetheless, be it constantly, decreasingly or increasingly, both financial gurus (Buffet, 2010) and happiness experts (Dunn and Norton, 2013a, 2013b) agree that spending on others is what provides the really happiest returns.

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References


