

FROM WEALTH TO WELL-BEING: SPENDING MONEY ON OTHERS PROMOTES
HAPPINESS

by

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ABSTRACT

While previous research has examined the effect of income on happiness, we suggest that how people spend their money may be as important for their well-being as how much they earn. Specifically, we hypothesized that spending money on others may have a more positive impact on well-being than spending money on oneself. We found converging evidence for this hypothesis in a nationally representative survey (Study 1), a longitudinal study of windfall spending (Study 2), and an experimental study in which participants were randomly assigned to spend money on themselves or others (Study 3). We also found that people believe that spending on themselves, as opposed to others, will make them happier (Study 4) and that happier people were more likely to spend on others and experience higher happiness as result (Study 5). These results demonstrate that spending money on others may facilitate the translation of wealth into well-being.

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From Wealth to Well-Being: Spending Money on Others Promotes Happiness

Can money buy happiness? This question has inspired a flurry of research converging on the answer that money has a surprisingly weak effect on happiness (Diener & Biswas-Diener, 2002; Frey & Stutzer, 2000), especially once basic needs are met (Diener, Sandvik, Seidlitz & Diener, 1993). Given that money can provide the means to aid the pursuit of almost any goal, however, we questioned whether money could be used to effectively increase happiness if it is spent in the pursuit of objectives that are reliably associated with improved well-being, such as prosocial behavior. Thus, we sought to investigate whether investing money in others could lead to higher levels of happiness than spending money on oneself.

The Relationship Between Money and Happiness

Research from a variety of domains supports the claim that money has a small but significant effect on happiness (e.g., Diener & Biswas-Diener, 2002; Frey & Stutzer, 2000). The bulk of this evidence supporting this finding comes from the United States, several European countries and Japan (Easterlin, 1995) where personal income and national Gross Domestic Product (GDP) have escalated to double their size over the past several decades while citizen happiness levels have remained nearly unchanged (Maddison, 1991; OECD, 1992; Inglehart & Rabier, 1986). For example, a meta-analysis of 46 happiness survey studies collected in the United States from 1946-1977 reported a peak of happiness in the 1950's with no distinguishable increasing trend over time (Smith, 1979). More recently, Lucas and Dyrenforth (2006) reviewed two meta-analyses on yearly or bi-yearly nationally representative data and concluded that the average correlation between income and well-being falls between .17 and .21. While this relationship is robust, it falls on the lower end of conventional measures of association (Cohen, 1988). Therefore, while many people may try to accumulate wealth, believing it will bring

higher happiness and life satisfaction (Kahneman, Krueger, Schkade, Schwarz & Stone, 2006; Aknin, Dunn, Lucas & Norton, 2008), a large body of evidence suggests that these efforts may be misdirected.

The large body of research showing little influence of income on happiness does not mean that money is irrelevant; in fact income has a great impact on happiness at the lower ends of the income distribution. Indeed, several scholars have argued that the apparently weak or nonexistent relationship between income and happiness is only the standard in wealthy, developed nations (Veenhoven, 1991; Inkeles, 1993). Outside these privileged borders, where a large portion of the population struggles to make ends meet, a steeper relationship may exist. Thus, when someone seeks to sustain themselves and their loved ones in the face of poverty, money has a strong influence. Once these basic necessities are satisfied, however, the relationship between income and happiness is believed to flatten as income's importance for survival fades (Easterlin, 1995).

In summary then, money has a larger impact on happiness when people fall at the lower end of the income distribution and seek to fulfill their basic life requirements. Above a certain poverty threshold, as is the case within most developed countries, however, the effect of income greatly decreases, having a limited influence on happiness and life satisfaction.

Why Might Income Have a Weak Effect on Happiness?

If money provides the resources necessary to aid in achieving most goals, why is it that income has such a small impact on happiness once basic needs are met? Several explanations for this curious finding have been proposed.

One compelling reason why people are not happier with their greater wealth is offered by Festinger's social comparison theory (1954). This theory suggests that we constantly compare

our possessions, skills and social standing to those held by the people around us and experience happiness when we have more (Hagerty, 2000; Helson, 1964; Pardo, 1968). Thus, applying this theory to the money and happiness relationship parses the effect of relative and absolute income changes. While absolute income has increased dramatically over time, this change has affected everyone in a given society leaving relative standings unchanged. As a result, few individuals are happier than before (Easterlin, 1973; 1974; 1995, but see Stevenson & Wolfers, 2008) despite their newly accumulated wealth.

A second reason why money may not translate into higher happiness levels is that people adjust to life events quickly. This adaptation process, commonly referred to as the “hedonic treadmill” (Brickman & Campbell, 1971), describes the tendency for people to rapidly acclimatize to positive and negative life events, such that every experience is transitory (Myers, 1992, but see Diener, Lucas & Scollon, 2006). Therefore this theory proposes that while people may have initially experienced a quick burst of happiness with rising income levels, they have adjusted to this increased income such that they are no happier than they were before receiving this economic boost.

A third compelling reason why people are not happier with their greater wealth is that people pour their increased income into spending choices that provide little in the way of lasting happiness gains. In a recent article entitled *How Not to Buy Happiness*, economist Robert Frank argues that the gains in happiness that would have been expected to accompany greater wealth have not materialized because of the ways in which people have generally chosen to spend their income. Frank points to common material purchases, such as bigger homes and faster cars, as examples of spending choices that have been shown to have little lasting impact in increasing happiness. Instead, Frank (2004) suggests that people should spend their money on the items

and in service of other goals that have been shown to increase happiness, such as social relationships, exercise and other research supported routes to happiness.

The Hedonic Benefits of Prosocial Behavior

While money has been shown to have a relatively small impact on happiness, an emerging body of research suggests that engaging in prosocial behavior can increase well-being. This relationship has been well documented through correlational research (Aderman, 1972; Cunningham, Steinberg & Grev, 1980; Lucas, 2001; Rosenhan, Underwood & Moore, 1974; Williams & Shiaw, 1999), while several experimental studies have suggested that mood boosts lead to increased helping behavior (e.g., Isen & Levin, 1972). More recently, however, Lyubomirsky, Tkach & Sheldon (2004) have demonstrated that the causal arrow may operate in the opposite direction as well. In their investigation, Lyubomirsky and colleagues randomly assigned a student sample to an experimental group required to commit five random acts of kindness a week for six weeks or to a no-treatment control group. As predicted, the students engaging in prosocial behavior were happier, relative to controls, when all five acts were performed in the same day. Generally speaking then, a positive association has been found between prosocial behavior and increased well-being in adolescent and adult populations (Piliavin, 2003). One of the most comprehensive examinations of the benefits of volunteering argues that not only does prosocial behavior act to increase happiness, but that people with higher levels of well-being invest more time in volunteer work (Thoits & Hewitt, 2001). This finding suggests that a positive feedback loop may exist, such that happier people are more likely to engage in prosocial behavior and receive a mood boost as a result.

Given that prosocial behavior has been shown to increase happiness, we sought to test whether using money to this end could increase happiness as well. Specifically, we hypothesized

that spending money on others, through gift giving and charitable donations, would lead to higher happiness levels than spending money on oneself.

The Present Research

This paper presents five studies designed to test the hypothesis that spending money on others leads to higher happiness than spending money on oneself. Study 1 provides an initial test of the relationship between happiness and prosocial spending by measuring whether these two variables are associated in a large nationally representative sample of Americans. Study 2 extends this investigation by making use of a longitudinal design, allowing for a close look at how happiness levels change overtime as a function of spending choices. Study 3 provides a direct test of this hypothesis using an experimental design and Study 4 investigates people's intuitions of these spending choices. Lastly, Study 5 examines whether prosocial spending and happiness operate in a positive feedback loop reinforcing one another.

STUDY 1

In Study 1, we asked participants to rate their general happiness and provide monthly estimates of personal and prosocial spending to examine how these variables relate in the general population¹.

Method

Participants

A nationally representative sample of six hundred thirty two Americans (55% female) completed a large online questionnaire in exchange for points that could be redeemed for prizes.

Procedure

Participants were asked to report their annual household income and general happiness level and to estimate how much they spend in a typical month on (1) bills/expenses ($M = 1658.35$, $SD = 1878.82$), (2) gifts for themselves ($M = 55.65$, $SD = 109.89$), (3) gifts for others ($M = 62.85$, $SD = 105.71$), and (4) donations to charity ($M = 83.34$, $SD = 265.64$). Monthly spending estimates were used to create indices of personal and prosocial spending. We summed together categories 1 and 2 for an index of personal spending ($M = \$1713.91$, $SD = 1895.65$) and categories 3 and 4 for an index of prosocial spending ($M = \$145.96$, $SD = 306.06$). Reports of annual household income were gathered by asking participants to select their appropriate income bracket from the following options: less than \$20,000, \$20,001-\$35,000, \$35,001-\$50,000, \$50,001-\$65,000, \$65,001-\$80,000, \$80,001 or more. Lastly, we asked participants to report their general happiness ($M = 4.10$, $SD = 0.80$) on a one item happiness scale (Abdel-Khalek, 2006) which simply asked participants "Do you feel happy, in general?". Response options provided were: no, rarely, sometimes, most of the time, yes, which we coded numerically from 1-5 such that higher values correspond to higher levels of general happiness.

Results and Discussion

To investigate whether personal or prosocial spending was associated with higher happiness levels, both spending indices were entered into a regression equation predicting happiness ratings. Analyses revealed that while higher levels of prosocial spending were significantly associated with higher happiness levels ($\beta = .11, p < .01$), personal spending was not ($\beta = -.02, ns$)². To examine whether income (*Mode* = \$20,001 - \$35,000) may be influencing this relationship, income was included as third predictor in the above equation. Replicating the earlier result, analyses revealed that higher prosocial spending is associated with higher happiness levels ($\beta = .10, p < .03$) and that income level has an independent and similar association with happiness ($\beta = .11, p < .01$).

Summary of Results

In Study 1, we found support for our hypothesis that prosocial spending is associated with higher happiness levels in the population, even while controlling for income. Yet, while these results provide a first glimpse of the association between these two variables in the population, the correlational nature of this study restrains discussion of causal claims. These results could just as easily suggest that happier people spend more prosocially as they could suggest that engaging in these prosocial acts leads to higher happiness levels. Furthermore, these correlational findings could be explained by an unmeasured third variable, such as materialism, which has been shown to be associated with both large amounts of personal spending and low happiness levels (Kasser, 2002; Richins & Dawson, 1992). Therefore, to further understand the prosocial spending and happiness link discovered in Study 1, we took a closer look at spending choices and their impact on happiness over time in Study 2. Using a longitudinal design, we were

able to investigate whether happiness levels changed as a function of personal and prosocial spending choices.

STUDY 2

Study 2 was designed to take a closer look at how personal and prosocial spending choices impact happiness levels over time using a longitudinal design.

Method

Participants

Sixteen employees (19% female; $M_{\text{age}} = 38.00$, $SD = 11.42$) at a Boston-based firm participated in this two part study in exchange for a Dunkin' Donuts gift card and chance to win a one hundred dollar prize.

Procedure

Time 1 Questionnaire. Participants were contacted with an initial questionnaire one month before receiving a profit sharing bonus from their firm ($M = \$4918.64$, $SD = 1816.98$). In this initial questionnaire participants were asked to record their annual income before taxes ($M = \$35,536.67$, $SD = 16456.70$) and happiness level using the same one-item measure as in Study 1 ($M = 4.25$, $SD = 0.68$). Each questionnaire package included a letter of information explaining that all responses provided would remain confidential and no identifying information would be given to their employer. To ensure this confidentiality, each package contained a pre-stamped and addressed envelope so that the questionnaire could be mailed directly to the research laboratory.

Time 2 Questionnaire. Participants were contacted 6-8 weeks after receiving their bonus with the second questionnaire package. Each participant rated their happiness on the same one-item measure ($M = 4.19$, $SD = 0.75$) as before and then reported what percentage of their bonus

money they had spent on: (1) bills/expenses, (2) rent/mortgage, (3) buying something for themselves, (4) buying something for someone else, (5) donating to charity, and (6) other. Estimates of personal and prosocial spending were calculated by summing categories 1-3 for an index of personal spending ($M = 63.44$, $SD = 38.20$) and 4-5 for an index of prosocial spending ($M = 12.19$, $SD = 18.35$). Participants reported spending the majority of their bonus ($M = 90.00$, $SD = 17.22$) by the time they received the second questionnaire.

Results and Discussion

When both spending indices and Time 1 happiness were entered into a regression equation predicting Time 2 happiness, analyses revealed that prosocial spending was the only significant predictor of happiness at Time 2 ($\beta = .81$, $p < .02$)³. To control for income and bonus amount, each variable was added to the model separately and revealed no change in the relationship. Specifically, when income was entered as an additional predictor ($\beta = -.03$, ns), prosocial spending ($\beta = .96$, $p < .05$) was still the only significant predictor of happiness at Time 2. Similarly, when bonus amount ($\beta = .00$, ns) was entered as an additional predictor, prosocial spending ($\beta = .81$, $p < .05$) remained the only predictor of Time 2 happiness.

Summary of Results

In Study 2, our hypothesis that higher levels of prosocial spending are associated with happiness gains over time was confirmed using a longitudinal design. Moreover, analyses revealed that prosocial spending was the only predictor of happiness at Time 2 while controlling for Time 1 happiness, personal spending, income and bonus size. These results, then, extend the conclusions of Study 1 by showing that not only are these variables related in the population, but higher amounts of prosocial spending led to a significant increase in happiness, even while controlling for initial happiness levels. While the analyses conducted thus far offer hints towards

the direction of causality, an experimental design is required to test this question. Therefore, Study 3 sought to investigate whether spending money on others is a more effective route to happiness than spending money on oneself. An additional measure of positive affect, the Positive and Negative Affect Schedule (PANAS; Watson, Clark & Tellegen, 1988), was included in Study 3 to provide a second and reliable measure of happiness.

STUDY 3

In Study 3, an experimental design was used to test the casual claim that spending money on others leads to higher happiness levels than spending money on oneself. Our hypothesis was that participants randomly assigned to spend money in a prosocial fashion would be happier at the end of the day than others assigned to spend money on themselves.

Method

Participants

Forty-six University of British Columbia (UBC) undergraduates (74% female; $M_{\text{age}} = 21.00$, $SD = 3.66$) participated in both phases of this study. Participants were reimbursed for their time with the small monetary windfall they received (five or twenty dollars). Three participants were excluded from analyses because they reported “not at all” following the assigned spending directions (2 participants in the personal spending condition and one participant in the prosocial spending condition).

Procedure

Participants were approached in person during the morning hours (approximately 10am – noon) in public places of the UBC campus. Each participant reported their baseline happiness level in a Time 1 questionnaire using the one-item happiness measure (Abdel-Khalek, 2006) and

the Positive Affect Negative Affect Schedule (Watson, Clark & Tellegen, 1988). After completing the initial questionnaire, participants were randomly assigned to one of four spending conditions, receiving either five or twenty dollars to spend in a personal or prosocial manner (see Appendix I). Specifically, participants in the personal spending condition were asked to use their windfall on a bill/expense or gift for themselves and participants in the prosocial spending condition were asked to spend their given money on a gift for someone else or donation to charity. All participants were asked to spend the money in line with their assigned spending direction by 5pm that day. Participants were then contacted in the evening hours (between 6pm-8pm) on the phone by a research assistant, blind to their condition assignment, to complete a follow up survey. During this follow up survey, participants reported their current happiness level on the PANAS and an adapted one-item state measure of happiness which asked participants how happy they had been overall that day (responses were given on a 5-point Likert scale, from *1-Not at all happy* to *5- Extremely happy*). We created a reliable 11-item measure of happiness by standardizing and averaging the 10 positive affect items of the PANAS with the one-item general happiness question for Time 1 ($\alpha = .81$) and one-item state measure for Time 2 ($\alpha = .87$).

Results and Discussion

Because there were no pre-existing happiness differences between conditions at Time 1, post-windfall happiness ratings were analyzed using a 2 (Spending Direction) X 2 (Money Amount) ANCOVA, with pre-windfall happiness as a covariate. As predicted, analyses revealed a significant main effect of spending direction, $F(1,41) = 4.39, p < .04, \eta_p^2 = .10$, such that prosocial spending led to higher happiness levels ($M = .18, SD = .62$) at the end of the day than

personal spending ($M = -.19, SD = .66$). Interestingly, the analyses also revealed that windfall amount and the interaction of spending type and windfall size were not significant (F 's < 1). Thus, in this study, how people spent their money was more important than how much money they were given to spend.

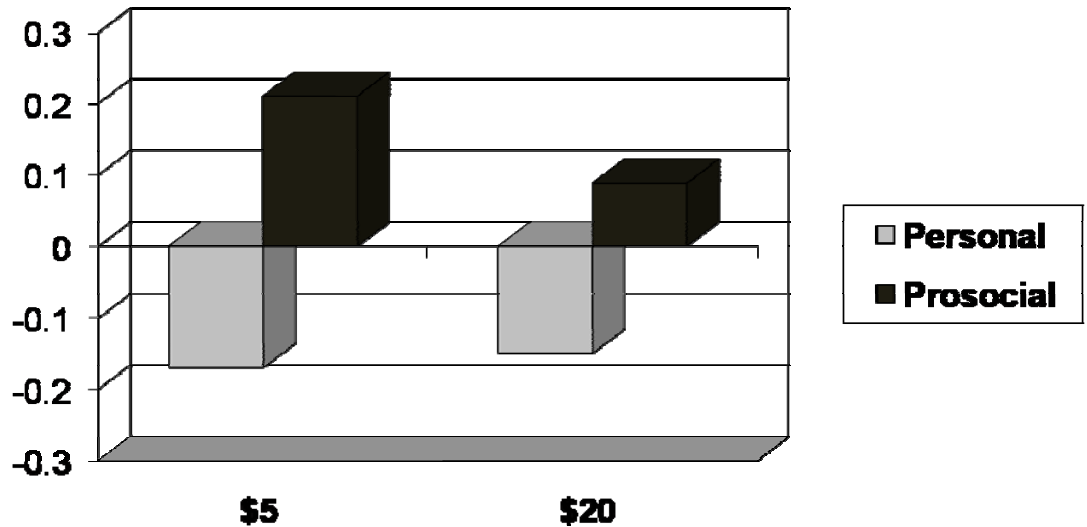


Figure 1. Time 2 happiness in standardized scores by condition controlling for Time 1 happiness.

Manipulation Check

While completing the follow up survey, participants were asked for descriptions of how they chose to spend their windfall. Spending descriptions were recorded so that a team of seven coders blind to condition assignment could objectively evaluate the level of spending direction adherence, providing an additional manipulation check. Prototypical spending choices listed in the personal spending condition were school supplies, eye shadow and meals eaten alone, while prototypical purchases in the prosocial spending condition were donations to the homeless, gifts for siblings and meals shared with friends. Coders rated each spending choice on a 5-point

Likert scale where endpoints were listed as *1 = bill/expense or gift for the self* and *5 = a gift for someone else or donation to charity*. Coders exhibited a high degree of internal reliability ($\alpha = .98$) and, as expected, rated purchases made by participants in the prosocial condition ($M = 4.70$, $SD = .37$) to be significantly more prosocially oriented than participants in the personal spending condition ($M = 1.86$, $SD = .96$; $t(43) = 13.16$, $p < .001$).

Summary of Results

Study 3 provides support for the causal claim that spending money on others leads to higher happiness than spending money on oneself. This two-part study design allowed us to control for individual differences in morning happiness levels. Moreover, these results suggest that the spending amount need not be large to facilitate positive hedonic gains, as prosocial purchases made with as little as five dollars were able to boost happiness levels.

Taken together, then, Studies 1-3 offer converging evidence for the hypothesis that spending money on others leads to higher happiness than spending money on oneself. We found initial evidence for this claim in Study 1 where results from a nationally representative sample of Americans demonstrated that higher amounts of prosocial spending are associated with higher happiness levels, while no such relationship existed for personal spending. Study 2 extended these findings using a longitudinal design to show that happiness increases over a 2-3 month period were a function of bonus money spent on prosocial ends. Lastly, Study 3 used an experimental design to test this claim and showed that, regardless of spending amount, prosocial spending led to higher happiness than personal spending.

A close examination of spending habits reported in Studies 1 and 2 reveals a noticeable discrepancy between personal and prosocial spending amounts. In Study 1, for example,

participants reported spending more than ten times as much on personal purchases than on prosocial spending and, again, in Study 2 participants reported spending over five times more of their bonus money on personal, rather than prosocial, ends. While it is common for most people to devote a larger amount of their money towards general life costs, another possibility is that people overlook the positive hedonic benefits associated with prosocial spending. Therefore, Study 4 sought to examine whether people thought that spending money on themselves would make them happier than spending money on others.

STUDY 4

In Study 4, we asked participants to predict which spending condition listed in Study 3 would make them happiest. Our hypothesis was that participants would think that spending money on themselves would make them happier than spending money on others.

Method

Participants

One hundred nine UBC undergraduate students (69% female, $M_{\text{age}} = 21.59$, $SD = 3.70$) were approached in public places on campus and invited to participate in a study on spending habits. Participants were reimbursed for their time with a chocolate bar.

Procedure

Participants were given a one page questionnaire that listed the four experimental conditions in Study 3 (see Appendix 1). Participants were asked to read through brief descriptions of these conditions and rank order them such that their top choice reflected the condition that would make them happiest.

Results and Discussion

Not surprisingly, a Fisher's exact test revealed that a significant majority of participants thought that spending twenty dollars ($n = 94$) rather than five ($n = 15$) would make them happier ($p < .0005$). Importantly, however, a significant majority of participants reported that spending the money on themselves ($n = 69$) would make them happier than spending the money on someone else ($n = 40$, $p < .05$).

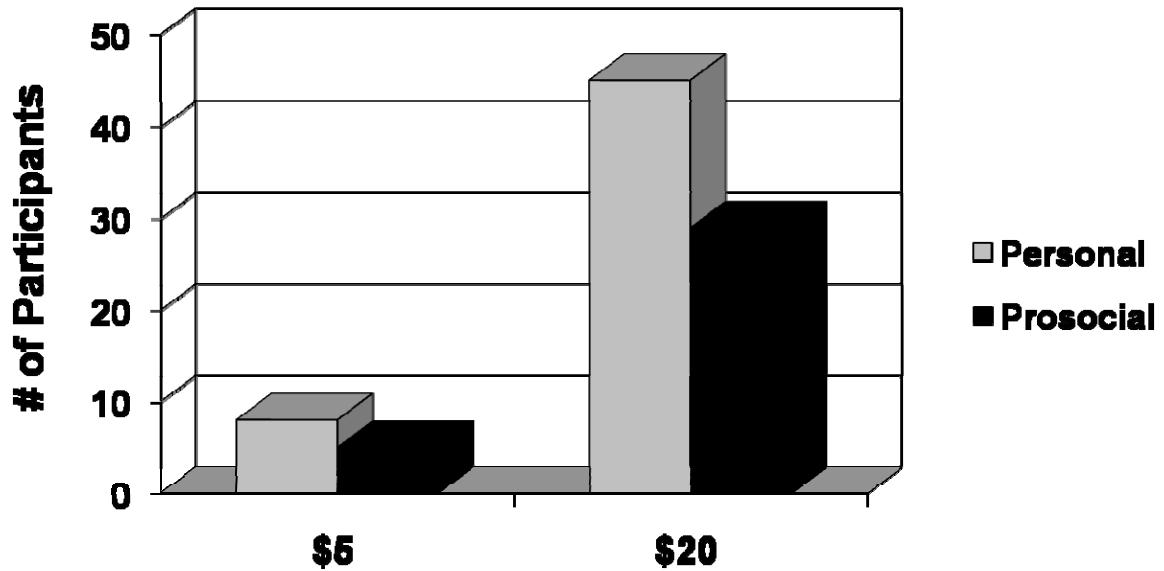


Figure 2. The number of participants selecting which spending condition they thought would make them happiest.

Summary of Results

As predicted, participants in Study 4 displayed two incorrect intuitions regarding spending; participants believed that spending *more* money on *themselves* would be associated with higher happiness. The popular endorsement of these intuitions conflicts with the results of

Study 3, suggesting that people do overlook the happiness returns associated with prosocial spending.

Yet while a significant proportion of participants reported a preference of spending money on themselves rather than on someone else, a smaller fraction stated the opposite. Given the previous literature on volunteering and prosocial behavior showing that happier people are more likely to engage in these activities and experience higher happiness levels from doing so (e.g., Thoits & Hewitt, 2001; Piliavin, 2003), we sought to examine whether this same relationship exists with spending choices. Thus, in Study 5 we investigated whether people higher in baseline happiness levels were more willing to engage in prosocial spending and if they experienced happier happiness as a result.

STUDY 5

Study 5 consisted of a design identical to Study 3 except we asked participants to self assign themselves into one of the four spending conditions. Our hypothesis was that happiness and prosocial spending would operate in a feedback loop, such that higher happiness would encourage prosocial spending and prosocial spending would increase happiness levels. Therefore, we predicted that happier people would be more likely to recognize the benefits of prosocial spending and place themselves in one of the prosocial spending conditions as a result. Furthermore, we hypothesized that participants who engaged in this prosocial spending would be happier at the end of the day than participants who engaged in personal spending, even while controlling for their initial happiness.

Method

Participants

Thirty-six UBC students (72% female; $M_{\text{age}} = 21.08$, $SD = 3.06$) participated in both phases of this study. Participants were reimbursed for their time with the small monetary windfall they selected (five or twenty dollars). Fifteen additional participants (six participants in the personal spending condition and nine participants in the prosocial spending condition) could not be reached for the follow up questionnaire and were therefore excluded from analyses.

Procedure

Participants were approached in person during the morning hours (approximately 10am – noon) in public places of the UBC campus. As before, each participant reported their baseline happiness level in a Time 1 questionnaire using the PANAS (Watson, Clark & Tellegen, 1988). After completing the initial questionnaire, participants were presented with the four conditions from Study 3 and were asked to select the condition they thought would make them happiest (see Appendix I). Earlier pilot tests revealed that many participants were concerned that the money being distributed was drawn from the researcher's personal funds. Therefore, to address these anxieties, all participants in this sample were notified that the money they would receive was from a research grant.

Self Selected Condition Assignment

To mitigate social desirability concerns, the self selected condition assignment procedure was conducted in an anonymous fashion. Participants were given a set of cue cards labeled A, B, C, or D on one side with a condition description on the alternate side. All research assistants who came in contact or interacted with the participants were unaware of which condition assignment corresponded to each letter. Participants were given several minutes alone to read

through the set of cue cards and decide which condition they would like to be in. Once the decision was made, participants were instructed to inform the research assistant of their choice using the appropriate letter. The research assistant then handed the participant a standard sized envelope which contained the chosen money amount inside and spending direction pasted on the front. Research assistants recorded the participants' condition choice, using the A-D letter coding scheme, and asked participants to spend their windfall in line with their chosen spending direction by 5pm that day. Participants were then contacted in the evening hours (between 6pm-8pm) on the phone by a research assistant, blind to their condition, to complete a follow up survey. During this follow up survey, participants reported their current happiness level on the PANAS and gave descriptions of how they spent their given money.

Results and Discussion

Initial Happiness and Condition Selection

As in Study 4, a significant majority of participants showed a preference for spending twenty dollars over five ($X^2 = 13.44, p < .001$, see Table 1). Participants also showed a preference for personal over prosocial spending, yet this preference did not reach significance ($X^2 = 0.44, ns$). To investigate whether baseline happiness was a predictor of prosocial spending choice, this relationship was tested using a logistical regression analysis. As expected, initial happiness was indeed a significant predictor of condition assignment ($\beta = 1.01, p < .02$), such that happier people chose to spend on others by selecting a prosocial spending condition. Initial happiness, however, did not predict the amount of money participants selected to spend ($\beta = -.68, ns$).

	Number of Participants	Time 1 Positive Affect
\$20 Personal Spending	18	2.69
\$20 Prosocial Spending	11	3.06
\$5 Personal Spending	2	2.40
\$5 Prosocial Spending	5	3.56

Table 1. The number of participants in each self selected condition and the Time 1 positive affect ratings for each condition.

Follow Up Questionnaire

To investigate the unique influence of prosocial spending on happiness, both Time 1 positive affect and spending direction were entered into a regression equation predicting Time 2 happiness. In line with our hypothesis, spending direction was a significant predictor of Time 2 happiness ($\beta = .31, p < .05$), even while controlling for initial happiness ($\beta = .58, p < .001$).

Summary of Results

Study 5 confirmed our hypothesis that happiness and prosocial spending fuel one another in a circular fashion. By allowing participants to self select their own condition assignment, we were able to establish that higher baseline happiness levels were associated with prosocial spending choices. Furthermore, by contacting participants later in the day after they committed their chosen personal or prosocial spending purchase, we were able to show that spending money in this fashion was associated with greater happiness still, while controlling for the effects of initial happiness.

GENERAL DISCUSSION

In the present research we examined whether money can increase happiness if spent on others rather than on oneself. This hypothesis was supported through a set of five studies. In Study 1, we found that larger amounts of prosocial spending were associated with higher levels of happiness in a nationally representative sample of Americans. In Study 2, we extended these findings by showing that prosocial spending choices were associated with significant happiness gains over several months time, using a longitudinal design. Study 3 used an experimental design to confirm the causal link between prosocial spending and happiness by showing that participants randomly assigned to spend money on others were significantly happier at the end of the day than participants randomly assigned to spend the same amount on themselves. Study 4 suggested that the benefits associated with prosocial spending are often overlooked. Lastly, Study 5 suggested that the link between prosocial spending and happiness is circular in nature, such that happier people are more likely to choose to spend prosocially and become happier as result.

Practical Implications of this Research

Our research has approached a familiar area of study from a novel point of view. In shifting focus away from the overall relationship between money on happiness, toward an examination of the potential well-being benefits of prosocial spending, a new area of investigation is opened. By examining how money can increase happiness, this work allows researchers to determine how people can best spend their increased disposable income to enhance their quality of life.

But is happiness of any value beyond the positive feelings associated with the emotional state? A large body of evidence suggests that the answer to this question is yes, higher happiness

levels are associated with a number of positive life outcomes. For example, higher levels of positive affect have been linked with creativity (Isen, Daubman & Nowicki, 1987), life expectancy (Danner, Snowdon, & Friesen, 2001) and numerous other positive life outcome variables (see Lyubomirsky, King & Diener, 2005 for a review). These findings suggest that the happiness-success link exists not only because success leads to higher happiness, but also because higher happiness bring about success (Lyubomirsky et al, 2005).

Aside from the promising opportunities for individual gain, this research has practical implications for volunteer based charitable organizations. Informing potential donors of the numerous positive outcomes associated with giving may entice greater monetary support. For instance, notifying interested donors that not only their funds will go towards their cause of interest but that their actions will increase their own happiness levels may act as an additional draw for donation. However, it is possible that the well-being benefits of prosocial spending could decrease or disappear if people act prosocially for these very returns. For example, if a donor gives to a charity with the goal of increasing their happiness it is unclear whether the same well-being benefits will materialize. Current data collection is underway to examine this research question.

A final remark should be made about which conclusions cannot be drawn from this research. What this research does not suggest is that prosocial spending is the *only* route to happiness. As noted in this paper's introduction, other research has shown engaging in various forms of prosocial behavior can increase happiness such that money need not even enter the equation (Thoits & Hewitt, 2001; Piliavin, 2003). This research does, however, offer one potential path to higher happiness levels by suggesting that investing small monetary amounts

into prosocial ends can provide a substantial happiness return. This pathway may be particularly helpful for people who have little time or skill to donate.

Theoretical Implications of this Research

The finding that spending money on others can lead to significant happiness gains has several theoretical implications. Lyubomirsky, Sheldon and Schkade's (2005) model of happiness suggests that chronic happiness levels are determined by three primary factors: genetic set point, life circumstances and intentional activity. With genetic information and life condition acting as fixed and stable features, making changes to one's intentional activities may serve as the most promising avenue to happiness increases. Therefore, this research supports this model by demonstrating that a simple intentional activity, such as minimal alterations in daily spending, can lead to higher levels of well-being. Our research may also extend Lyubomirsky, et al's (2005) model of happiness by offering an explanation of why some people find happiness unattainable. As seen in our fourth study, many people overlook the benefits of prosocial spending. With the noticeable stability of genetics and life conditions considered alongside the overlooked benefits of prosocial spending, people may incorrectly believe that happiness levels are set and fail to engage in the research supported routes to happiness increases. Furthermore, this work may suggest that happiness and unhappiness are self-perpetuating. As seen in Study 5, people with higher baseline happiness levels were more likely to engage in activities that increased their happiness, while people with lower baseline levels of happiness were less likely to select the same options. Therefore, this research suggests that initial well-being can shape the choices people make, such as when deciding between personal and prosocial spending, and reinforce the happiness levels that encouraged this decision.

Methodological Implications of this Research

Aside from offering a novel research question, this work provides one of the first experimental investigations of the money and happiness relationship. In a nearly exhaustive review of the literature to date, Diener and Biswas-Diener's (2002) reported only a handful of experimental or quasi-experimental studies. Indeed, the overwhelming majority of evidence gathered to address the income and well-being relationship has been correlational in nature. Our research paradigm, however, offers a new way to investigate the short term impact of money on happiness by contacting participants in the morning and evening hours while manipulating spending directions. This procedure allows for the effects of spending choices to be easily manipulated and compared, controlling for baseline levels of happiness.

Limitations and Future Directions

There are several limitations to the present research that warrant discussion. The first of these is the summation and categorization of spending amounts into personal and prosocial spending indices (i.e. combining estimates and directions of bills/expenses with self gifts to form an index of personal spending and combining gifts for others with donation to charity for an index of prosocial spending). While merging choices into spending indices allowed for two distinct spending types to be studied, these purchases are often very different in nature. For example, grouping together money spent on one's bills and expenses along with that of money used to treat oneself to a gift may be less than optimal. This may be the case because while spending money to buy oneself a gift could likely increase happiness, combining this with money spent on bills and expenses may drop the associated happiness level reported. Similarly, combining spending estimates of the money spent to buy someone else a gift and money donated to a charitable organization may preclude a more nuanced understanding of prosocial spending.

It could be that one of these particular spending types, buying a gift for someone we know or simply donating the money to a cause with which we associate, may be responsible for the largest happiness gains. Thus, while the present research provides a first investigation of personal and prosocial spending, future research could gain a more refined understanding of spending choices by using more fine grained spending categories and examining the well-being implications of each type.

A second limitation of the present research is that participants in Study 3 were given a windfall amount and were not required to use their “own” money in accordance with our spending directions. While this procedure is the most obvious and ethical way to study spending behavior, it does not allow for an investigation of the naturally occurring spending choices that take place with one’s own disposable income. Furthermore, it is likely that participants acknowledged this windfall as such and viewed their purchase as somewhat artificial in nature. Concerns of this kind are mitigated, however, by the finding that happiness levels associated with windfall spending produce similar effects to the spending choices made with one’s own true income as seen in Studies 1 and 2. Thus, while Study 3 relied on giving participants a windfall amount to spend, the observed happiness gains associated with prosocial spending were similar to the happiness increases seen when one’s own income is used in this same fashion. Nonetheless, this issue could be addressed by giving participants the same money amounts (i.e. five or twenty dollars) as payment for completion of an earlier task. Doing so may convince participants that this money is now theirs, therefore any ensuing spending behavior and happiness change may be perceived as more authentic.

Future research along these lines should investigate the mechanism responsible for the well-being benefits of prosocial spending. Despite the variety of prosocial spending choices, we

found that participants were happier after engaging in these prosocial spending than when spending money in a personal fashion. Thus, future research should attempt to determine which underlying psychological mechanisms are responsible for the observed happiness gains. For example, it may be the act of helping is enough to increase well-being. Indeed, helping behavior has been linked to increased happiness because it may prompt an altruistic and positive self view (Lyubomirsky, Sheldon & Schkade, 2005), a more confident and controlled ability to help, and inspire appreciation and reciprocity from others (Trivers, 1971). In addition, prosocial spending, by its very nature, encourages people to spend some time in contact with their loved ones and community. In fact, early investigations along these lines in our lab have suggested that spending time with others may be a key component of the well-being benefits produced by prosocial spending. Therefore, upcoming research that seeks to provide a more nuanced understanding of prosocial spending could be used to inform interested individuals of the most fruitful activities in which to engage for higher happiness levels.

Another extension of this research should focus on the benefits of prosocial spending experienced by the recipient. The results described in the present research focus solely on the positive implications of prosocial spending for the spender, but it is likely that these purchases have an impact for those on the receiving end. To the extent that prosocial purchases affirm and strengthen social relationships, these purchases should lead to an increased amount of happiness and well-being for the recipient as well.

Finally, another logical extension may be to investigate whether prosocial spending habits can function in self-perpetuating fashion, beyond the individual. Specifically, it would be worthwhile to examine whether prosocial spending purchases are reciprocated and therefore increase happiness for both the givers and recipients in both transactions. For example, if Alisa

chooses to engage in an act of prosocial spending and take her friend Susan for coffee, Susan is likely to return the favor and buy Alisa a coffee in the near future (Fehr & Gächter, 2000; Fiske, 1991). While the reciprocated purchase leaves both women with the same value of goods they could have acquired individually, the time spent with one another is likely to strengthen their relationship and provide enjoyment beyond that which would have been experienced while consuming the four coffees alone. Thus, initiating one prosocial act may encourage another. Furthermore, it may be that the well-being benefits of prosocial spending extend beyond the immediate giver and recipient in an indirect fashion. For example, Putnam (1995) has argued that living in a community with strong social capital, which may be encouraged by this type of spending, has benefits for those who are not directly involved in the actions that foster social capital ties. Such communities foster norms of reciprocity and trust, enhancing the quality of life for all members. Thus, the present research lays the foundation for understanding how prosocial spending can be used to increase happiness for spenders, recipients and the larger community.

CONCLUSION

The present research suggests that spending money on others can promote happiness. In moving away from the previous work demonstrating the weak relationship between money and happiness, this investigation suggests that money has the potential to increase happiness through minimal alterations in spending behavior. It appears that while prosocial spending choices may often be overlooked, happier people are more likely to choose to spend prosocially and become happier as result. Future research should extend upon the present research to uncover the underlying psychological mechanisms responsible for this effect and ways to encourage prosocial spending choices more broadly so that increases in income can be translated into higher happiness levels.

FOOTNOTES

¹The first four studies described in this thesis have been published in *Science*. All of these studies were submitted in the same paper, authored by Elizabeth W. Dunn, Lara B. Aknin and Michael I. Norton, under the title “Spending money on others promotes happiness.” In the current thesis, all writing and analyses for these four studies were done by the author of this thesis.

²Regression assumptions for Study 1 were examined using ARC (version 1.06) and SPSS (version 14.0). Diagnostic tests revealed that while the data were best fit by a linear model, assumptions of homoscedasticity and normality of errors were violated. Therefore, bootstrapping procedures were used to test the effect of prosocial spending on happiness. Verifying inferences drawn before, the 95% confidence interval did not cross zero, confirming that prosocial spending is a significant predictor of happiness.

³Regression assumptions for Study 2 were examined using ARC (version 1.06) and SPSS (version 14.0). Diagnostic tests revealed that while the data exhibited trends of curvilinearity, assumptions of homoscedasticity and normality of errors were met. Bootstrapping analyses were conducted nevertheless to confirm the inferences drawn using the standard regression approach and found that the 95% confidence interval for prosocial spending did not cross zero, confirming that prosocial spending is a significant predictor of happiness.

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APPENDIX I: SPENDING DIRECTIONS GIVEN IN STUDY 3

Please spend this \$5.00 today before 5pm on a gift for yourself or any of your expenses (e.g. rent, bills, or debt). We will be contacting you this evening, on the phone number you gave us, between 6-8pm for a few follow up questions.

Thank You for participating in our study!

Please spend this \$5.00 today before 5pm on a gift for someone else or a donation to charity. We will be contacting you this evening, on the phone number you gave us, between 6-8pm for a few follow up questions.

Thank You for participating in our study!

Please spend this \$20.00 today before 5pm on a gift for yourself or any of your expenses (e.g. rent, bills, or debt). We will be contacting you this evening, on the phone number you gave us, between 6-8pm for a few follow up questions.

Thank You for participating in our study!

Please spend this \$20.00 today before 5pm on a gift for someone else or a donation to charity. We will be contacting you this evening, on the phone number you gave us, between 6-8pm for a few follow up questions.

Thank You for participating in our study!

APPENDIX II: SUMMARY OF MEMORY STUDY

116 University of British Columbia students (68% female; $M_{\text{age}} = 20.84$, $SD = 2.77$) recalled and described the last time they spent \$0, \$20 or \$100 dollars in general or on improving a social relationship in the past month before rating their current happiness. Spending type, money amount and an interaction term were entered into a regression equation predicting current happiness levels. Analyses revealed a significant interaction, such that participants were happier recalling larger spending amounts only when this money was spent to improve a social relationship ($\beta = .28$, $p < .05$). This interaction remained significant even when controlling for differences along an obligatory- volitional dimension ($\beta = .26$, $p = .051$) and a material-experiential dimension ($\beta = .25$, $p < .05$). A closer look at participants in the general purchase condition revealed that recalling more expensive purchases led to lower levels of current happiness ratings ($\beta = -.17$), while recalling more expensive purchases made to strengthen a social relationship led to higher levels of happiness ($\beta = .23$). Thus, this finding suggests that recalling larger prosocial purchases can have lasting happiness benefits.

APPENDIX III: SUMMARY OF HOLIDAY STUDY

We asked a sample of 44 (50% female; $M_{\text{age}} = 21.09$, $SD = 3.34$) University of British Columbia students to rank order the four experimental conditions in Study 3 such that their top choice reflected the condition that would make them happiest. This study was run in late December so that the title of the questionnaire could be manipulated to reflect either the upcoming holiday season (i.e. *Holiday Season Study*) or the standard *Spending Habits* title. Chi-square analyses revealed that participants randomly assigned to the holiday season title were significantly more likely to report that spending money prosocially would make them happier than were participants receiving the typical spending habits title, $\chi^2(1) = 4.54$, $p < .04$. This result suggests that mentioning the forthcoming holiday season may remind people of the benefits associated with prosocial spending.

APPENDIX IV: SUMMARY OF MOTHER'S DAY STUDY

We asked a sample of 30 (60% female; $M_{\text{age}} = 26.73$, $SD = 8.29$) University of British Columbia students to complete a survey identical to the Holiday Study mentioned above. As before, the study title of the questionnaire was manipulated to either mention the standard *Spending Habits* title or another upcoming holiday, Mother's Day. Chi-square analyses revealed that participants randomly assigned to the mother's day title were significantly more likely to report that spending money prosocially would make them happier than were participants receiving the typical spending habits title, $X^2(1) = 5.55$, $p < .02$. Thus, these results again suggest that mentioning an upcoming holiday may remind people of the benefits associated with prosocial spending.



CERTIFICATE OF APPROVAL - MINIMAL RISK AMENDMENT

PRINCIPAL INVESTIGATOR: Elizabeth Dunn	DEPARTMENT: UBC/Arts/Psychology, Department of	UBC BREB NUMBER: H06-80557
INSTITUTION(S) WHERE RESEARCH WILL BE CARRIED OUT:		
Institution	Site	
UBC	Vancouver (excludes UBC Hospital)	
Other locations where the research will be conducted: Public locations on campus and in the Kenny Psychology Building.		
CO-INVESTIGATOR(S): Stefanie Debest Lara Aknin		
SPONSORING AGENCIES: Social Sciences and Humanities Research Council of Canada (SSHRC) UBC Hampton Research Endowment Fund UBC Start Up Funds - "Daily Activities" - "Daily Habits" - "Spending Habits"		
PROJECT TITLE: Daily Habits Translating Increased Wealth into Increased Well-being: How Money Can Buy Happiness Holiday Season Study		

Expiry Date - Approval of an amendment does not change the expiry date on the current UBC BREB approval of this study. An application for renewal is required on or before: May 21, 2009

AMENDMENT(S):	AMENDMENT APPROVAL DATE: June 12, 2008
Document Name	Version
Date	

The amendment(s) and the document(s) listed above have been reviewed and the procedures were found to be acceptable on ethical grounds for research involving human subjects.

**Approval is issued on behalf of the Behavioural Research Ethics Board
and signed electronically by one of the following:**

-
- Dr. M. Judith Lynam, Chair
 Dr. Ken Craig, Chair
 Dr. Jim Rupert, Associate Chair
 Dr. Laurie Ford, Associate Chair
 Dr. Daniel Salhani, Associate Chair
 Dr. Anita Ho, Associate Chair