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**Experiential Purchases and Prosocial Spending Promote Happiness  
by Enhancing Social Relationships**

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**Experiential Purchases and Prosocial Spending Promote Happiness  
by Enhancing Social Relationships**

**Abstract**

Recent research on consumption and subjective well-being has revealed that experiential purchases and prosocial spending promote happiness by enhancing the purchasers' social relationships. This study ( $N = 1,523$ ) explored whether undergraduate students' consumption behaviors during summer break would be associated with their post-break happiness, and whether the consumption-happiness relationship would be mediated by a positive influence on their social relationships. The results showed that both experiential purchases and prosocial spending during summer break were associated with greater post-break happiness, but only when these purchases had a positive influence on the purchasers' social relationships. These effects remained significant after controlling for respondents' personality traits, financial standing, and sex. Moreover, both experiential purchases and prosocial spending were more likely to have a positive influence on social relationships than luxury purchases. These results are congruent with the recent exposition that experiential purchases and prosocial spending promote happiness by enhancing the purchasers' social relationships.

*Keywords:* experiential purchase, prosocial spending, happiness, social relationships

**Experiential Purchases and Prosocial Spending Promote Happiness  
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Wealth is a source of happiness and feelings of subjective well-being, yet its effect is modest (Diener & Biswas-Diener, 2002; Myers & Diener, 1995). In fact, the mere possession of money seems to be less important than how one uses it in determining happiness and subjective well-being (Dunn, Gilbert, & Wilson, 2011). For example, Van Boven and Gilovich (2003) found that purchasing experiences makes people happier than purchasing material possessions. Dunn, Aknin, and their colleagues have revealed that prosocial spending (i.e., spending one's money on someone else) promotes happiness more than spending money on oneself (Aknin, Barrington-Leigh et al., 2013; Dunn, Aknin, & Norton, 2008). Interestingly, subsequent studies revealed that the happiness-enhancing effects of these two types of consumption behaviors are mediated by their positive effects on social relationships (see Gilovich, Kumar, & Jampol, 2015; Dunn, Aknin, & Norton, 2014, for recent reviews). In the present study, we investigated whether undergraduate students' experiential purchases and prosocial spending during summer break would influence their post-break happiness, and whether these effects would be mediated by the nurturing of social relationships.

***Experiential Purchases vs. Material Purchases***

In their seminal work, Van Boven and Gilovich (2003) revealed that people felt happier after spending money on experiences, such as travel and concerts, than on material goods. For example, in their nationwide survey, Van Boven and Gilovich (2003, Study 2) asked respondents to think about an experiential purchase and a material purchase, and then choose which one made them happier. The majority of respondents reported that the experiential purchase made them happier than the material purchase. Moreover, this tendency was consistent across most

subgroups defined by various demographic variables, such as gender, age, and ethnicity (with a notable exception of the extremely low-income group, for which the difference between the two types of purchases was not present). Subsequent studies have repeatedly confirmed the happiness-enhancing effect of experiential purchases (Carter & Gilovich, 2010, 2012; DeLeire & Kalil, 2010; Nicolao, Irwin, & Goodman, 2009). Van Boven (2005) attributed this effect to three characteristics of experiential purchases: (1) positive effects on social relationships, (2) centrality to self-identity, and (3) amenability to favorable reinterpretation (see also Gilovich et al., 2015).

Caprariello and Reis (2013) argued that the first characteristic (i.e., the positive effect on social relationships) is central to the happiness-enhancing effect of experiential purchases. In their online survey (Study 4), Caprariello and Reis asked respondents to describe a recent discretionary purchase. In addition to reporting their happiness, respondents categorized their purchase on the two dimensions of experiential vs. material and social vs. solitary. For example, if one purchased clothes to wear to go out with someone, this constituted a material-social purchase, and if one went to a museum by him- or herself, this was an experiential-solitary purchase. Caprariello and Reis found that the social purchases made respondents happier than the solitary purchases, and once the social-solitary dimension was taken into account, the effect of the experiential-material dimension became non-significant. Caprariello and Reis concluded that compared to material purchases, experiential purchases are more likely to have a positive influence on the purchasers' social relationships, thereby enhancing their happiness (see also DeLeire & Kalil, 2010; Howell & Hill, 2009).

### ***Prosocial Spending***

In a series of studies, Dunn, Aknin, and their colleagues revealed that spending money on others (e.g., gifts, charitable donations) fosters happiness more than spending money on

oneself (Aknin, Barrington-Leigh, et al., 2013; Dunn et al., 2008). For example, in an ingenious experiment employing a 2 (amount of money)  $\times$  2 (type of spending) between-participants factorial design, Dunn et al. (2008) gave either \$5 or \$20 to their participants in the morning, and asked them to spend the money on themselves or someone else. They contacted the same participants again in the evening (i.e., after participants had spent the money) and asked them to report their level of happiness. Those who had spent the money on someone else were happier than those who had spent it on themselves. Furthermore, in an attempt to establish the universality of this effect, Aknin, Barrington-Leigh, et al. (2013) examined survey data across 136 countries, and found positive correlations between prosocial spending and happiness in 122 countries.

Aknin, Dunn, Sandstrom, and Norton (2013) maintained that the happiness-enhancing effect of prosocial spending is mediated by its positive effect on social connections. For example, Aknin, Dunn, et al. (2013, Study 3) gave participants a coffee gift card along with one of the following four instructions: Give it to a friend (i.e., sheer prosocial spending), go to a coffee shop with a friend and use it to buy coffee for both (i.e., prosocial spending plus social connection), go to a coffee shop alone (i.e., the control for coffee consumption) or go to a coffee shop with a friend and use the card only on themselves (i.e., the control for social connection). They observed higher post-experimental happiness only among those who had shared the gift card with their friend. In another study, Aknin, Sandstrom, Dunn, and Norton (2011) asked their respondents to recall a time when they had spent money on a strong-tie partner (e.g., family member, friend) or a weak-tie partner (e.g., acquaintance, friend of a friend). Respondents reported greater happiness after reflecting on the instance of spending money on a strong-tie partner. These results suggest that the elevation of happiness that prosocial spending causes is

dependent on its positive effect on social relationships.

### ***Overview of the Present Study***

The abovementioned two lines of research are in agreement that the purchasers would be happier when their consumption behaviors had a positive influence on their social relationships. However, these findings might be criticized as demand characteristics because of a common methodological problem penetrating these studies. In particular, happiness was measured after assessments or manipulation of ‘positive influence on social relationships’. For example, participants were asked to recall a certain type of purchase (e.g., Caprariello & Reis, 2013) or instructed to use one’s endowment in a certain way (e.g., Aknin, Dunn, et al., 2013). As a result, some participants might have reasoned in a way congruent with the research hypothesis (e.g., ‘I should be happy because my consumption behavior enhanced my social relationships’), and this reasoning might have biased their subsequent responses to the happiness items. The primary purpose of the present study was to examine whether the effect of enhanced social relationships would be replicated by measuring respondents’ happiness before the assessment of their consumption behaviors. To this end, this study combined the self-report of current level of happiness and the retrospective recall of consumption behaviors. Specifically, right after summer break, which lasted for slightly less than two months (a substantial portion of August and September), Japanese undergraduate students were asked to report their level of happiness and then their consumption behaviors during break. We tested the following two hypotheses.

Hypothesis 1a: *Experiential purchases during summer break make the purchasers happier when they had a positive influence on the purchasers’ social relationships.*

Hypothesis 1b: *Prosocial spending during summer break makes the purchasers happier when it had a positive influence on the purchasers’ social relationships*

Although the assessment order is a notable strength of this study, it is nevertheless correlational by its nature. Therefore, it does not allow us to draw any strong causal inferences. One problem pertinent to this study is the possibility of spurious correlation. For example, ‘sociable’ purchasers might be happier and more likely to experience positive social offshoots from their consumption behaviors. As a partial remedy for this problem, this study asked respondents to fill out a short personality questionnaire so that we were able to statistically control for the effects of sociable personality traits, such as extraversion. In addition, in order to test whether the observed effect was driven by sociable respondents, we conducted subsequent analyses with ‘less sociable’ subsamples.

The method of this study (i.e., having respondents report subjective feelings first, and then objective facts) allowed us to examine two types of consumption behaviors in a single study. Furthermore, we included an additional consumption behavior, ‘luxury’ material purchases (the material purchases were limited to luxury items in order to prevent respondents from reporting purchases of daily necessities, which would not necessarily reflect respondents’ discretionary consumption behaviors). Inclusion of luxury purchases allowed us to explore whether the mediation effect of enhanced social relationships would be specific to experiential purchases and prosocial spending.

Somewhat related to the above point, we also tested whether experiential purchases and prosocial spending would be more likely to have a positive consequence on social relationships than luxury purchases. If experiential purchases and prosocial spending are associated with greater levels of happiness, and these effects are attributable to a positive influence on social relationships, it is predicted that these two types of consumption behaviors are more apt to enhance the purchasers’ social relationships than luxury purchases.



Hypothesis 2a: *Experiential purchases are more likely to enhance the purchasers' social relationships than luxury purchases.*

Hypothesis 2b: *Prosocial spending is more likely to enhance the purchasers' social relationships than luxury purchases.*

## **Method**

### ***Respondents***

Respondents were 1,523 undergraduate students at four universities (three private and one public) in Japan (651 females, 863 males, and 9 unknown;  $M_{\text{age}} = 19.69$  years,  $SD = 2.04$ ), after excluding 19 respondents: six for missing values and 13 for unrealistic responses.

Respondents with partial missing values (e.g., those who reported their experiential purchases but not other two types of consumption behaviors) were retained in the data set as much as possible, although this caused some fluctuation in the sample size from analysis to analysis. The unrealistic responses included a round-the-world trip and a cosmic journey as experiential purchases. Practically, we discarded 13 respondents who reported purchases of over-one-million Japanese yen ( $\approx 10,000$  U.S. dollars) during summer break because unrealistic responses became prevalent above this amount, although some of the reported purchases could be true (e.g., a car of ten million Japanese yen). Respondents took part in this study within two weeks after the fall term started at their university.

### ***Materials***

The questionnaire comprised five sections (see the Supplemental Online Material for the English-translated version of the questionnaire). The first section consisted of a brief test of the five-factor personality traits, the Newcastle Personality Assessor (NPA: Nettle, 2007), and two items of happiness. The NPA is a 12-item measurement of the five-factor personality traits. The

following two items measured happiness: ‘In general, I consider myself a happy person’ and ‘Compared to most of my peers, I consider myself happy’, which were adopted, with some modifications, from Shimai, Otake, Utsuki, Ikemi, and Lyubomirsky’s (2004) Japanese Subjective Happiness Scale (SHS).<sup>1</sup> The NPA and happiness items were accompanied by a 5-point scale (1 = ‘very uncharacteristic’ to 5 = ‘very characteristic’). There were two items for measuring extraversion, neuroticism, and conscientiousness, and the items for each trait were significantly correlated with each other:  $r = .30$ ,  $df = 1516$ ,  $p < .001$  (extraversion),  $r = .63$ ,  $df = 1519$ ,  $p < .001$  (neuroticism) and  $r = .07$ ,  $df = 1519$ ,  $p = .006$  (conscientiousness). Three items measured agreeableness and openness: Cronbach’s  $\alpha$  was .36 and .57 for agreeableness and openness, respectively. Although the reliability (or inter-item correlation) was not necessarily high, we aggregated these items to obtain personality scores and included them in the subsequent analyses in order to avoid the problem of selective reporting. The conscientiousness score was nonetheless excluded because its negligible inter-item correlation ( $r = .07$ ) and weak correlation with happiness ( $r = .10$ ). (The inter-item correlation of the happiness items is reported in the result section.)

In the second section, respondents reported their largest purchase during summer break. The largest expense was used as a proxy measure of respondents’ financial standing for the following reasons. It was expected that almost all respondents (i.e., undergraduates) are still financially dependent on their parents or guardians, and accordingly, each respondent’s own annual income (possibly from a part-time job) would not necessarily reflect the amount of his or her discretionary funds. On the other hand, the amount of these discretionary funds would necessarily constrain the student’s largest purchase.

The third to fifth sections asked about respondents’ experiential purchases, luxury

purchases, and prosocial spending, respectively. In each of these sections, respondents first indicated whether they had engaged in each type of consumption behavior. These questions read as follows:

Experiential purchase: *Did you spend your money to buy any ‘experiences’, such as traveling, going to a museum, going to a theme park, or going to a concert, during summer break?*

Luxury purchase: *During summer break, did you buy anything whose cost reflects its design besides its primary function? Examples include brand accessories, clothes, shoes, watches, cars, dishes, and electric appliances as far as they are more expensive than functionally-equivalent alternatives for reasons other than their functional efficiency.*

Prosocial spending: *During summer break, did you spend money on others? Examples include purchasing a gift for a family member or a friend, or making a donation to a charitable organization.*

A ‘yes’ response to each of these questions was followed up with the question of whether the purchase had had any positive influence on the respondent’s social relationships (see the SOM for other items).

## Results

Responses to the two happiness items were highly correlated with each other ( $r = .77$ ,  $df = 1519$ ,  $p < .001$ ); therefore, the ratings for these items were aggregated ( $M = 3.36$ ,  $SD = 0.95$ ). Consistent with previously reported findings (e.g., Graham & Chattopadhyay, 2012; Tiefenbach & Kohlbacher, 2013), female respondents in our study were significantly happier than male respondents:  $t(1461.40) = 4.50$ ,  $p < .001$ , Cohen’s  $d = 0.23$ ,  $M_{\text{female}} = 3.48$  ( $SD = 0.89$ ) vs.  $M_{\text{male}} = 3.26$  ( $SD = 0.98$ ).

***Enhanced Social Relationships and Happiness***

Hypotheses 1a and 1b predict a mediation effect: the effect of experiential purchases/prosocial spending on happiness would be mediated by a positive influence on social relationships. Based on their responses, the respondents were divided into three different groups for each of the three consumption behaviors: (i) those who did not spend money on X, which can be an experience, another person, or luxury item, (ii) those who spent money on X, but this consumption behavior did not enhance their social relationships, and (iii) those who spent money on X, and this consumption behavior enhanced their social relationships. Because of the lack of one cell corresponding to ‘those who did not spend money on X and the non-purchase enhanced their social relationships’, the standard tests of  $2 \times 2$  cross-tables (e.g.,  $\chi^2$  test) were not applicable. In other words, we were not able to compute the association between the predictor (consumption behavior) and mediator (enhancement of social relationships) due to lacking the necessary degree of freedom. Accordingly, standard mediation analyses (Baron & Kenny, 1986) were not applicable. Nonetheless, we tested the predictions derived from the mediation hypotheses: If the effect of consumption behavior on happiness is mediated by enhanced social relationships (i.e., if enhanced social relationships are necessary for the consumption behavior to foster happiness), respondents in group (iii), whose social relationships were enhanced, should be happier than respondents in group (ii). If there is no mediation effect, these two groups should not be different in happiness.

There were 212 respondents who made no experiential purchase during the summer break (*no experiential purchase* group), 119 respondents who made an experiential purchase that did not positively affect their social relationships (*solitary-experiential purchase* group), and 1,130 respondents who made an experiential purchase that positively affected their social

relationships (*relational-experiential purchase* group). An additional 62 respondents did not provide answers to the experiential purchase questions. The happiness score was submitted to a one-way ANOVA with the above three groups as the independent variable. The effect of group was significant,  $F(2, 1458) = 23.09, p < .001, \eta^2 = .03$ . As shown in Figure 1a, Tukey's honestly significant difference (HSD) test indicated that the relational-experiential purchasers (3.46,  $SD = 0.90$ ) were significantly happier (at the .001-level) than the no experiential purchasers (3.05,  $SD = 1.08$ ) and solitary-experiential purchasers (3.09,  $SD = 0.99$ ), while the latter two groups did not significantly differ in their levels of happiness. Therefore, Hypothesis 1a was supported: Making an experiential purchase contributed to respondents' greater happiness by positively influencing their social relationships.

We then tested Hypothesis 1b. There were 503 respondents who did not spend their money on someone else during summer break (*no prosocial spending* group), 124 respondents who spent their money on someone else, but reported that the prosocial spending did not positively affect their social relationships (*solitary prosocial spending* group), and 831 respondents who spent their money on someone else, and reported that the prosocial spending had some positive effects on their social relationships (*relational prosocial spending* group). An additional 65 respondents did not provide answers to the prosocial spending questions. A one-way ANOVA unveiled a significant main effect of group,  $F(2, 1455) = 16.67, p < .001, \eta^2 = .02$ . Paralleling the results of experiential purchases, Tukey's HSD test indicated that respondents in the relational prosocial spending group (3.49,  $SD = 0.90$ ) were significantly happier at the .001-level than those in the no prosocial spending group (3.22,  $SD = 0.99$ ) and those in the solitary prosocial spending group (3.15,  $SD = 0.98$ ), while the latter two groups did not significantly differ in their levels of happiness (see Figure 1b). Therefore, Hypothesis 1b was

supported.

Finally, we examined whether the same pattern would be observed for luxury purchases. There were 886 respondents who did not purchase any luxury item during the summer break (*no luxury purchase* group), 303 respondents who purchased a luxury item that did not positively affect their social relationships (*solitary-luxury purchase* group), and 293 respondents who purchased a luxury item that positively affected their social relationships (*relational-luxury purchase* group). An additional 41 respondents did not provide answers to the luxury purchase questions. Although a one-way ANOVA revealed the significant main effect of group,  $F(2, 1479) = 10.08, p < .001, \eta^2 = .01$ , it was associated with a different pattern than the previous two analyses (see Figure 1c). Tukey's HSD test indicated that the no luxury purchasers (3.27,  $SD = .95$ ) were significantly less happy than the solitary-luxury purchasers (3.51,  $SD = .88$ ) and the relational-luxury purchasers (3.48,  $SD = .98$ ), but the latter two types of purchasers did not significantly differ from each other in terms of happiness. This result suggests that a positive influence on social relationships is not necessary for luxury purchases to make the purchasers happier, and thus illuminates its unique role in experiential purchases and prosocial spending. In addition, the result can be conceived as counterevidence against the spurious correlation explanation (i.e., sociable people who are more likely to experience positive social offshoots are inherently happier). For luxury purchases, the positive influence on social relationships and happiness did not go hand-in-hand (see the discussion section for a possible interpretation of this result).

### ***Controlling for Individual Differences***

The correlational nature of this study prevents us from drawing any strong causal or mediational inferences. A plausible alternative explanation for the observed results is as follows:

Some people are inherently happier and more sociable, and are therefore keener to experience positive changes in their interpersonal relationships. To counteract this alternative explanation, we conducted two lines of additional analyses. First, we statistically controlled for some relevant personality variables in multiple regression analyses. Second, we focused on ‘less sociable’ subsamples and re-ran the comparable ANOVAs reported above. The ‘less sociable’ subsamples were extracted based on their responses to non-focal consumption behavior questions. For example, to test whether relational-experiential purchases enhance happiness, we excluded the respondents whose prosocial spending and/or luxury purchases enhanced their social relationships. The remaining respondents were less sociable in the sense that they did not enjoy an enhancement of social relationships in the two consumption domains.

We first examined whether the effect of enhanced social relationships on happiness would remain significant after statistically controlling for some relevant personality variables. In particular, in two separate multiple regression analyses, the happiness score was regressed on the four personality scores (conscientiousness was excluded due to the negligible inter-item correlation), financial standing, and gender as well as respondents’ purchase behavior (i.e., relational-experiential purchase/relational prosocial spending group vs. other groups). It should be noted that for the purchase behavior variable, the no experiential purchase (no prosocial spending) group and the solitary-experiential purchase (solitary prosocial spending) group were collapsed because the previous analysis indicated that there was no significant difference between these groups. Each respondent’s financial standing was approximated by his or her largest purchase during the break. The distribution of the largest expenses was positively skewed with a mean of 76,710 JPY (approximately 770 U.S. dollars),  $SD = 100,751$ , skewness = 2.78. Therefore, this variable was natural log-transformed (post-transformation skewness = -0.39) and

included in a multiple regression analysis. As shown in Table 1, the relational-experiential purchase group was significantly happier than the other groups (i.e., the no experiential purchase group and the solitary-experiential purchase group) after controlling for the relevant individual difference variables. Similarly, the relational prosocial spending group was significantly happier than the other groups (i.e., the no prosocial spending group and solitary prosocial spending group) after controlling for the relevant individual difference variables.

We then tested the effects of relational-experiential purchases and relational prosocial spending on happiness focusing on the less sociable subsamples. We first discarded respondents whose social relationships were enhanced by prosocial spending, luxury purchases, or both. This left 525 respondents who were less likely to enjoy an enhancement of social relationships. A one-way ANOVA showed a significant effect of experiential purchase,  $F(2, 522) = 13.57, p < .001, \eta^2 = 0.05$ . Tukey's HSD test indicated that relational-experiential purchasers (3.38,  $SD = 0.95, n = 335$ ) were significantly happier than solitary-experiential purchasers (3.00,  $SD = 0.98, n = 65$ ) at the .05-level, and no experiential purchasers (2.88,  $SD = 1.08, n = 125$ ) at the .001-level. The latter two groups were not significantly different in their levels of happiness. We then tested the effect of relational prosocial spending on happiness by discarding the respondents whose social relationships were enhanced by experiential purchases, luxury purchases or both. This left only 284 respondents. A one-way ANOVA showed the significant effect of prosocial spending,  $F(2, 281) = 4.90, p = .008, \eta^2 = 0.03$ . Tukey's HSD test indicated that the relational prosocial spending group (3.32,  $SD = 0.98, n = 94$ ) was significantly happier than the no prosocial spending group (2.90,  $SD = 1.05, n = 159$ ) at the .01-level, but not happier than the solitary prosocial spending group (3.02,  $SD = 1.01, n = 31$ ) possibly due to the small sample size. The latter two groups did not differ in their levels of happiness.<sup>2</sup> These results suggest that the



original results were not necessarily driven by “sociable” respondents who were inherently happier and more likely to experience a positive influence on their social relationships.

### ***Enhancement of Social Relationships***

We then tested Hypotheses 2a and 2b. Of the respondents who had made both experiential and luxury purchases during summer break ( $n = 542$ ), 242 reported that their experiential purchase positively affected their social relationships, while only 13 reported that their luxury purchase did so;  $\chi^2 = 203.86$ ,  $df = 1$ ,  $p < .001$  by McNemar’s test: Experiential purchases had a positive influence on the purchasers’ social relationships more frequently than luxury purchases did, and thus Hypothesis 2a was supported. Out of 448 respondents who spent their money on both someone else and a luxury good during summer break, 181 answered that their prosocial spending influenced their social relationships positively, whereas only 13 respondents reported that their luxury purchase did so,  $\chi^2 = 143.76$ ,  $df = 1$ ,  $p < .001$  by McNemar’s test: Prosocial spending had a positive influence on the purchasers’ social relationships more frequently than luxury purchases did, and thus Hypothesis 2b was supported. It is noteworthy that these differences cannot be ascribed to respondents’ personality traits because these differences were observed in within-respondent comparisons. Therefore, it can be concluded that regardless of purchasers’ personality traits, experiential purchases and prosocial spending are more likely to have a positive influence on the purchasers’ happiness than luxury purchases.

### **Discussion**

This study revealed that both experiential purchases and prosocial spending were associated with greater happiness only when these purchases had a positive influence on the purchasers’ social relationships. That is, those who made experiential purchases or engaged in

prosocial spending in a solitary manner were no happier than those who did not exhibit these two types of consumption behavior. A different pattern was observed for luxury purchases: Luxury purchases made the purchasers happier even in the absence of a positive influence on the purchasers' social relationships. This study also revealed that experiential purchase and prosocial spending were more likely to foster the purchasers' social relationships than luxury purchases. Therefore, although the former two types of consumption behaviors themselves are not sufficient to make the purchasers happier, they tend to enhance the purchasers' social relationships, which in turn make the purchasers happier. Considering all the findings, this study provides support for the recent claim that experiential purchases and prosocial spending make the purchasers happier via their positive influence on social relationships (e.g., Aknin et al., 2011; Aknin, Dunn, et al. 2013; Caprariello & Reis, 2013; DeLeire & Kalil, 2010; Howell & Hill, 2009).

This study makes two unique contributions to the growing research field of money and happiness. First, the design of this study (i.e., assessing happiness first) ruled out the possibility of demand characteristics—the responses to the consumption behavior questions did not influence the responses to the happiness items. Second, this study was conducted in Japan, an Eastern country. Therefore, the results of this study suggest that the previously documented effects in the Western context are generalizable to Eastern cultures.

As noted, the results of the present study suggest that sheer experiential purchases and prosocial spending, if not accompanied by positive effects on social relationships, do not increase happiness. However, there are studies that showed experiential purchases (e.g., Van Boven & Gilovich, 2003) and prosocial spending (e.g., Aknin, Barrington-Leigh, et al., 2013; Dunn et al., 2008) enhanced happiness. It remains possible that the present study detected only enduring effects: pleasure due to a single event of an experiential purchase or prosocial spending may be

ephemeral, while enhanced social relationships allow the purchasers to keep reaping positive effects on their subjective well-being.

### *Limitations*

There are some limitations of this study. First, although this study attempted to statistically control for potentially confounding variables by conducting a series of multiple regressions analyses and re-running ANOVAs with ‘less sociable’ subsamples, the correlational nature precludes strong causal inferences among consumption behaviors, enhanced social relationships, and happiness—it remains possible that the observed effects were mediated by some individual differences that were not measured in this study. To exclude this possibility, the within-respondent design (i.e., the pre-break happiness score vs. the post-break happiness score) might be useful. If those who engaged in a particular type of consumption behavior and experienced a positive influence on their social relationships during summer break became happier after the summer break, we could be more certain that the consumption behavior made them happier through enhancement of social relationships. Such within-respondents design studies are needed to draw a stronger causal conclusion.

Second, we did not collect details of each consumption behavior because we tried to keep the questionnaire as concise as possible. For example, we did not ask respondents to describe the nature of the positive influence. This information would have allowed us to draw deeper conclusions about why the enhancement of social relationships may be essential for consumption behaviors to promote happiness. The details of consumption behaviors may also have helped us understand the unexpected effect of luxury purchases, which promoted happiness regardless of whether they enhanced social relationships. Retrospectively, we suspect that the luxury purchase question might have elicited ‘self-gift giving’ episodes from respondents. It is

known that self-gifts are often purchased to reward one's own achievements (Mick & Demoss, 1990). Therefore, the apparent happiness promoting effect of luxury purchases might be attributable to preceding goal-achievements, rather than luxury purchases per se.

Finally, caution should be taken in generalizing the findings because this study included only undergraduate students (Arnett, 2008). It is plausible that most of our respondents were financially dependent on their parents/guardians. Consumption behaviors might have different effects on the purchasers' happiness when they spend their own money versus when they spend allowances from parents/guardians. For example, this study indicated that those who had made luxury purchases were happier than those who had not. In contrast, a survey in rural India showed that conspicuous consumption (one type of luxury purchases) makes the purchasers less happy (Linssen, van Kempen, & Kraaykamp, 2011). The difference might be attributable to the peculiarity of the student sample—they could make luxury purchases without sacrificing daily necessities. Therefore, further studies, incorporating experimental designs, such as a pre vs. post design, and general samples are needed.

### ***Conclusion***

This study showed that both experiential purchases and prosocial spending tend to enhance the purchasers' social relationships, and the enhanced social relationships in turn make the purchasers happier. These effects seem to be enduring, at least for a few weeks, as they were statistically detectable in a post-break assessment of happiness. Thus, it is important to investigate the effects of real-life purchase behaviors on happiness and their generalizability, effect sizes and durability to better understand what we should buy to be happy.

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### Endnotes

<sup>1</sup> We used only two of the four items from Shimai et al.'s (2004) scale. This decision was made based on the following two considerations. First, we wanted to keep the questionnaire as concise as possible because we aimed at collecting data from a large number of students. Second, the two unused items were worded slightly differently than the two items used in this study. The two items we adopted more easily accommodated the NPA items.

<sup>2</sup> The comparable subsample analysis was conducted with luxury purchases as the independent variable. However, when we discarded the respondents whose social relationships were not enhanced by their experiential purchases, prosocial spending, or both, there were only 206 respondents retained in the dataset. Moreover, there were only 16 and 28 respondents in the relational- and solitary-luxury purchase groups, respectively. Therefore, this analysis suffered from a severe reduction in statistical power. The one-way ANOVA showed the significant effect,  $F(2, 203) = 3.18, p = .044, \eta^2 = 0.03$ . Tukey's HSD indicated that the solitary-luxury purchase group (3.38,  $SD = 0.83$ ) was significantly happier than the no luxury purchase group (2.84,  $SD = 1.06, n = 162$ ) at the .05-level, but not happier than the relational-luxury purchase group (2.94,  $SD = 1.06$ ). The latter two groups did not significantly differ in their levels of happiness. However, these results should be cautiously interpreted at this point because of the small sample sizes in the two luxury purchase groups.

Table 1

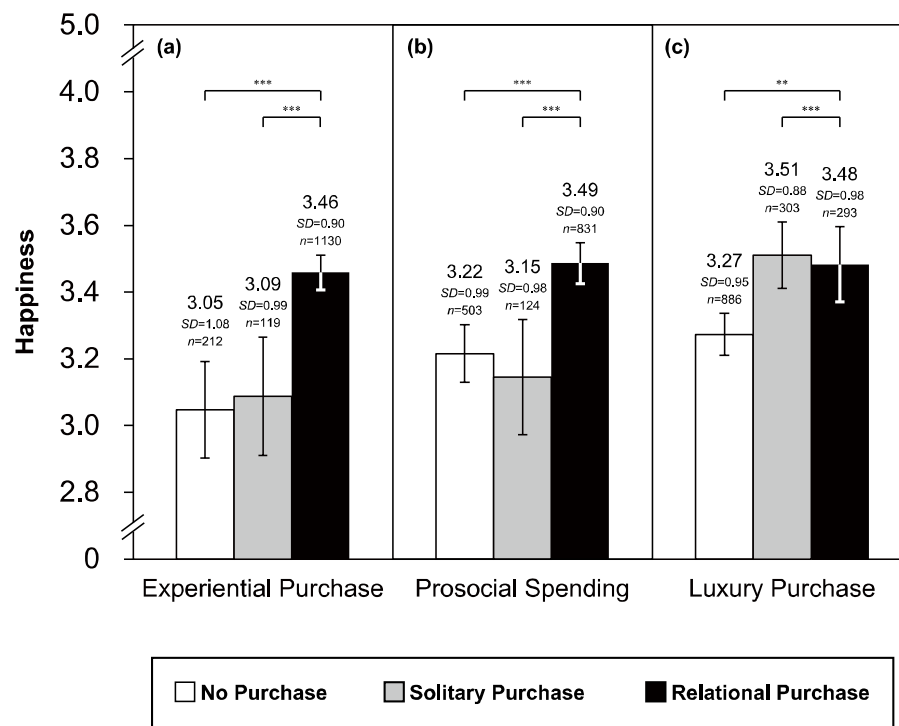
*Standardized Regression Coefficients (Standard Errors) for Consumption Type (Relational Experiential or Relational Prosocial), Sex, Financial Standing, and Four Personality Variables from Two Separate Multiple Regression Analyses Predicting Happiness*

	Experiential Purchase		Prosocial Spending	
	Standardized Coefficient		Standardized Coefficient	
	(Standard Error)		(Standard Error)	
Consumption Type (relational = 1, other = 0)	.100	***	.084	**
	(.025)		(.025)	
Sex (female = 1, male = 0)	.111	***	.107	***
	(.026)		(.026)	
Financial Standing	.049	+	.048	+
	(.027)		(.026)	
Extraversion	.097	***	.092	***
	(.026)		(.026)	
Agreeableness	.169	***	.171	***
	(.026)		(.026)	
Neuroticism	-.222	***	-.231	***
	(.026)		(.026)	
Openness	.047	+	.038	
	(.026)		(.026)	

<sup>+</sup> < .10    \* < .05    \*\* < .010    \*\*\* < .001.

**Figure Caption**

*Figures 1.* Mean happiness as a function of purchase type: No experiential purchase vs. solitary-experiential purchase vs. relational-experiential purchase (Figure 1a), no prosocial spending vs. solitary prosocial spending vs. relational prosocial spending (Figure 1b), no luxury purchase vs. solitary-luxury purchase vs. relational-luxury purchase (Figure 1c). Error bars indicate 95% confidence intervals.



## **Supplemental Online Material**

### **Experiential Purchases and Prosocial Spending Promote Happiness**

#### **by Enhancing Social Relationships**

We report the English-translated version of the questionnaire used in this study as the Supplemental Online Material. Respondents were asked to fill out this questionnaire in a mass class setting. No special instructions were used beyond standard instructions (e.g., there are no right or wrong answers to the personality questions, please report your behaviors during summer break as accurately as possible; please do not talk with fellow students when filling out the questionnaire). The questionnaire was written in Japanese for the Japanese-speaking respondents. Although in this SOM we display the translated version of the questionnaire, the original Japanese questionnaire is available from the corresponding author upon request.

# Research on Personality of University Students/ Research on University Students' Consumption Behaviors

This questionnaire asks you to perform two tasks. As the first task, you will take a brief personality test. Then, we will ask you about your consumption behaviors during summer break.

The responses to this questionnaire are anonymous. Therefore, we cannot identify who provided which answers.

The responses to this questionnaire will not be used for any purposes other than research and education.

This research is being conducted at several universities. The completed questionnaires will be securely stored in the principal investigator's office.

If you find any items to which you do not want to provide an answer, or if you do not want to take part in this study, please hand in the questionnaire that is left partially or fully blank. If you have provided answers to the questionnaire, we will take it as a sign of your agreement to take part in this study.

Once you understand the above notes, please indicate your age, gender, and major at your university below, and then go on to the next page.

Age\_\_\_\_\_ Years Old

Gender: Male / Female

Your Major \_\_\_\_\_

The second page of the questionnaire comprised the NPA and the two happiness items. We have not reproduced the second page here because the full items of the NPA are reported elsewhere (see Appendix of Nettle, 2007). The happiness items are reported in the main text.

## Here, we ask how you spent money during summer break.

What was the largest expense you made during summer break? Please indicate the purchase for which you paid the largest amount of money in a single payment (please do not include periodic expenses, such as the rent for an apartment).

If you purchased a material object, please indicate the object. If you spent the largest amount of money on summer lodging with your university circle friends, or on travel, please describe it as follows (e.g., summer lodging with members of circle at [location]). In this case, please provide the sum of the travel and lodging expenses. If you spent the largest amount of money on a special vocational or driver's education school, please describe it as follows (e.g., a driver's education school to obtain a driver's license). If you were charged a large amount of money for mobile phone calls, and this was your largest expense, please describe it as "mobile phone charge."

Please indicate the sum of the expense:                      Approximately \_\_\_\_\_ Yen

Now we ask whether you made each of the following three types of purchases during summer break. We also ask if it was the largest expense that you described above, and if it affected your interpersonal relationships. Please circle the option that fits your particular purchase.

Did you spend your money to buy any "experiences," such as traveling, going to a museum, going to a theme park, or going to a concert, during summer break?

**Yes, I did**  
**No, I didn't**

If you answered "yes" to the above question, please answer the following questions.

Was it your largest expense during summer break?

**Yes / No**

Did it have any positive influence on your interpersonal relationships (e.g., you experienced it with your friends, it expanded your relationships)?

It  
**Had / Didn't Have**  
a positive influence on my  
interpersonal relationships

**<Please go to the next page>**

During summer break, did you buy anything whose cost reflects its design besides its primary function? Examples include brand accessories, clothes, shoes, watches, cars, dishes, and electric appliances as far as they are more expensive than functionally-equivalent alternatives for reasons other than their functional efficiency.

**Yes, I did**  
**No, I didn't**

If you answered "yes" to the above question, please answer the following questions.

Was it your largest expense during summer break?

**Yes / No**

Did it have any positive influence on your interpersonal relationships (e.g., you had a lively talk about it with someone, someone who saw it talked to you)?

It  
**Had / Didn't Have**  
a positive influence on my  
interpersonal relationships

Is it conspicuous when you use it in an ordinary manner (e.g., clothes or accessories you wear to go out, vehicle)?

**Yes / No**

During summer break, did you spend money on others? Examples include purchasing a gift for a family member or a friend, or making a donation to a charitable organization.

**Yes, I did**  
**No, I didn't**

If you answered "yes" to the above question, please answer the following questions.

Was it your largest expense during summer break?

**Yes / No**

Did the expense have a influence on your interpersonal relationships (e.g., was it a gift for someone)? Or was it a completely anonymous expense that only you know about?

It  
**Had / Didn't Have**  
a positive influence on my  
interpersonal relationships

As a result of the expense, were you thanked, returned some favor, or praised?

**Yes / No**

Finally, we ask about your life.

- Do you currently live alone? Or, do you live with your family?

**Living Alone / Living with Family / Other (e.g., Living with Relatives)**

- How many moves entailing a change of school did you experience after entering elementary school up until graduating from high school? (If you moved to the location of your current university after high school graduation, please count it as one move.)

**I Experienced \_\_\_\_\_ Move(s)**

- How many intimate friends do you have at your university? **Approximately \_\_\_\_\_**

**Thank you for your cooperation!**