Benefits Associated with Experiential and Material Purchases May Depend on Culture

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This paper is published at the **Social Psychological and Personality Science (SPPS)**. The present post-print may not replicate the final version published in the journal. It is not the copy of record and may differ from the final published version, which is available [here](#).

The Online Supplement document, data, codebook, R-code, and the analyses output can be found at <https://osf.io/n39gj/>.

APA Citation:

Razavi, P., Shaban-Azad, H., Chai, W. J., Zhang, J. W., Nguyen, N. H., & Howell, R. T. (2020). Benefits Associated with Experiential and Material Purchases May Depend on Culture. *Social Psychological and Personality Science*, 11(5), 626-637.

Abstract

Spending money on experiences, compared to materials, is often associated with more happiness. This *experiential advantage*, however, is developed based on samples from Western cultures. To investigate the boundaries of this effect, we studied participants from three divergent cultures (Iran, Malaysia, and the US; $N = 1718$), and examined the benefits of different purchase types across material-experiential and solitary-social dimensions. Results indicated a cross-culturally robust experiential advantage in terms of affiliative outcomes (i.e., positive other-focused emotions and relational enhancement), even when we accounted for the sociality of the purchases. However, the results were less consistent with the experiential advantage in terms of happiness and self-focused outcomes (i.e., self-focused emotions and self-elevation). Interestingly, experiential-solitary purchases were associated with stronger self-focused benefits among Iranians. We discuss possible explanations for this effect and offer recommendations for future research. Data and analysis code are publicly available at <https://osf.io/n39gj/>.

Keywords: experiential advantage, spending money, happiness, emotions, culture

In a seminal critique of social psychology, Rozin (2001) pointed out the surprising scarcity of research on major domains of social life such as “[...] leisure, sports, music, drama (theatre), money, or work” (p. 13). Since then, many of these domains have received substantial attention from researchers, leading to a growing literature. One such area is the research on spending money and happiness. Across a multitude of studies, researchers have found that spending money on experiences, compared to materials, leads to greater levels of happiness and satisfaction, an effect often referred to as the *experiential advantage* (Dunn & Weidman, 2015). Understandably, this effect has been well-publicized beyond psychology journals—upon googling the phrase “materials vs. experiences,” one will receive a plethora of advice to spend money on experiences as a way to increase happiness (e.g., The Atlantic (Hamblin, 2014, October 7), Forbes (Pozin, 2016, March 3), and The Guardian (Usborne, 2017, May 13)).

Despite its growth and popularity, the literature on the experiential advantage is susceptible to a second critique noted by Rozin (2001); most of the studies are based on samples from Western cultures, which represent “less than 10% to 15% of the populations on the face of the earth” (p. 13). As such, it is not clear whether the experiential advantage is generalizable beyond the Western, Educated, Industrialized, Rich, and Democratic (WEIRD; Henrich, Heine, & Norenzayan, 2010) societies. Consequently, in a thorough review of the field, Dunn and Weidman (2015) have proposed that an important next step is to expand the science of spending beyond WEIRD samples. One goal of the present research is to address this gap by examining the consequences of different types of purchases among diverse samples from Iran, Malaysia, and the US.

Informed by the literature on cross-cultural variability in concepts related to self and well-being (Kito, Yuki & Thompson, 2017;

Markus & Kitayama, 1991), we made methodological choices that can capture the consequences of experiences vs. materials in different domains. Importantly, we used a design that allows for examining the experiential advantage while accounting for the social-solitary dimension of the purchase (Caprariello & Reis, 2013). Furthermore, we discuss the necessity of cross-culturally examining aspects of well-being beyond happiness, and consequently measure emotions and cognitive evaluations associated with purchases while distinguishing between the self- and other-focused dimensions of these outcomes. In the following sections, we discuss the theoretical foundations of the present research which informed the decisions concerning study design, sampling, and choice of outcomes.

Money for Happiness

From concert tickets to trendy clothes, much of a person's discretionary income is spent with one specific goal: to be happy (Lebergott, 1993). This attempt to exchange money for happiness, however, is not always successful (Dunn, Gilbert & Wilson, 2011)—the outcome seems to be dependent on the type of purchase one makes. For example, some studies suggest that stronger materialistic values and a tendency to prioritize material possessions (i.e., tangible purchases kept in one's possession; Van Boven & Gilovich, 2003) is associated with lower well-being (Kashdan & Breen, 2007; Pandelaere, 2016), higher levels of depression and anxiety, and declined satisfaction with interpersonal relationships (see Kasser, 2016, for a review). In contrast, money spent on experiential purchases (i.e., purchases providing life experiences that one lives through and walks away with a memory) has been shown to yield

more happiness compared to material possessions (Carter & Gilovich, 2010; Millar & Thomas, 2009; Nicolao, Irwin & Goodman, 2009).

Several mechanisms have been proposed to account for this experiential advantage. First, experiential purchases provide more happiness through satisfaction of the fundamental need for relatedness (Howell & Hill, 2009). Experiences (compared to materials) often have a stronger affiliative dimension. In fact, Caprariello and Reis (2013) demonstrated that when participants spontaneously write about a purchase, the material purchases are approximately three times more likely to be solitary, and the experiential purchases are twice more likely to be social. Importantly, using a study design similar to the present research, Caprariello and Reis (2013) demonstrate that when controlling for the sociality of the purchases, the experiential advantage is mostly attenuated and sometimes reversed. Second, people generally associate their experiences more closely to their identity, compared to the possessions they own (Carter & Gilovich, 2012). Third, compared to material items for which people sometimes engage in invidious comparisons and counterfactual thinking, experiential purchases are less often subject to social comparison and rumination, due to the difficulty in placing a tangible or comparable value on subjective experiences (Carter & Gilovich 2010).

Studies testing the moderators of the experiential advantage demonstrate that the advantage is not experienced by everyone. For example, Van Boven and Gilovich (2003) found that, in contrast to those in the middle-to-higher social class, among those with lower income or lower education levels, experiential advantage was either absent or reversed (also

see Lee, Hall, & Wood, 2018). Furthermore, Millar and Thomas (2009) found that people who hold stronger materialistic values report similar levels of happiness for both material and experiential purchases (cf. Nicolao, Irwin & Goodman, 2009). These moderating variables (i.e., resource availability and materialist values) are known to vary cross-culturally, which demonstrates the importance of testing the boundaries of this effect on more diverse samples.

Beyond WEIRD: The Need for Diversity

Concerns about the homogeneity of samples from which psychological theories are generated has been repeatedly expressed over the past two decades (e.g., Arnett, 2008; Henrich et al., 2010), with recent reviews suggesting the issue is still widespread (Medin, Ojalehto, Marin, & Bang, 2017; Salari Rad, Martingano, & Ginges, 2018). In the experiential buying literature, a thorough examination by Dunn and Weidman (2015) showed that 87% of the studies relied on US student samples or Amazon's Mechanical-Turk participants, and none tested for cross-cultural differences (though 4% included international participants). This heavy reliance on a limited range of US samples raises concerns about the universality of the experiential advantage. Norenzayan and Heine (2005) recommend that one way to examine universality is to investigate a phenomenon in two or three populations that are highly divergent in various dimensions including "social practices, philosophical traditions, language, geography, socioeconomic status, literacy, and level of education" (p. 767). In-line with this approach, we examine the experiential advantage in three samples from cultures that vary in all the

previously mentioned dimensions (see Table 1).

We considered alternative predictions about experiential advantage across cultures. On the one hand, one might expect cross-cultural variability in the experiential advantage considering the global variations in materialistic values (Saucier et al., 2015) and how much emphasis cultures put on possessions (Koo & Suh, 2015). For instance, in a poll of 20 countries (IPSOS, 2013), a large proportion of respondents from China and India believed that their possessions are the measure of their success (71% and 58%, respectively), as opposed to only 21% of the US participants who endorsed such belief. Furthermore, while research on Western samples demonstrates a negative relation between materialism and well-being (e.g., Kasser, 2016), this is not always the case when examining Eastern samples (Wong, Rindfleisch, & Burroughs, 2003).

On the other hand, it is possible that experiential advantage replicates beyond the US because the underlying mechanisms contributing to the benefits of experiential spending are "existential universals" (see Norenzayan & Heine, 2005). For example, the need for relatedness and its role in human motivation has been documented beyond Western populations, including in Malaysia (e.g., Church et al., 2013) and in Iran (Hejazi, Salehnajafi, & Amani, 2015). Similarly, social comparison, another important mediator of experiential advantage, has been demonstrated to influence psychological processes in various cultural contexts, including gender stereotypes in Malaysia (Guimond et al., 2007) and academic achievement in Iran (Hassaskhah & Jahedi, 2015).

Table 1.

Country-level Indices of Relevant Cultural Variables, Well-being, and Economic Resources

	Unit	Iran	Malaysia	US	Source
<i>Cultural Variables</i>					
Collectivism-Individualism ¹	mean score	41	26	91	(Hofstede & Hofstede, 2010)
Autonomy-Embeddedness ²	z-score	0.98	1.40	-0.28	(Schwartz, 1994; Schwartz, 2006)
Tightness-Looseness ³	mean score	31.5	-	67.9	(Uz, 2015)
Looseness-Tightness ⁴	mean score	-	11.8	5.1	(Gelfand et al., 2011)
Fear of happiness	z-score	-0.43	0.20	-0.38	(Joshanloo et al., 2014)
Religiosity	mean score	82.5	90	65	(Joshanloo & Gebauer, in press)
<i>Well-being</i>					
Happiness	global rank	106	54	15	(Helliwell, Layard, & Sachs, 2018)
Life satisfaction	mean score	4.96	5.92	7.24	(Joshanloo, 2018)
Perceived social support	global rank	143	78	36	(Helliwell, Layard, & Sachs, 2018)
<i>Economic resources</i>					
GDP per capita	US\$	5627.75	10117.57	59927.93	(The World Bank Data, 2019a)
Educational attainment ⁵	%	23.06	18.84	43.51	(The World Bank Data, 2019b)
Consumption expenditure ⁶	US\$	2720.22	6297.76	36965.62	(The World Bank Data, 2019c)

Notes. ¹Higher scores on this dimension indicates stronger culture-level individualistic tendency. ²Lower scores indicate stronger cultural autonomy (i.e., the extent to which individuals are perceived as autonomous members and encouraged to express feelings and preferences). ³Higher scores indicate stronger societal norms and lower tolerance for non-conforming behavior (i.e., tightness). ⁴Higher scores indicate weaker social norms and higher tolerance for non-conforming behavior (i.e., looseness). ⁵The percentage of the population above the age of 25 (in 2016) that at least completed short-cycle tertiary education. ⁶Household spending (per capita) on all goods and services.

A third possibility, which is our stance, is that experiences and materials might be beneficial in different domains, some of which are universal and others are culture-specific. For example, the affiliative properties of experiences may lead to relational benefits whereas the sense of achievement associated with a material purchase could elicit a feeling of pride and self-worth. Consequently, we included outcome variables, other than happiness, that allow us to capture such nuances.

Beyond Happiness

The experiential advantage is often discussed in terms of happiness. From a cross-cultural perspective, it is beneficial to include a wider range of outcomes for two reasons: First, cultures vary on how much they value happiness (Ji, Nisbett, & Su, 2001)—while the members of some Western cultures may experience a “pressure” to pursue happiness (Mauss et al., 2012), there can be an “aversion” to higher levels of happiness in some non-Western contexts (Joshanloo & Weijers, 2014). Second, cultures differ in their definitions of happiness (Oishi, Graham, Kesebir, & Galinha, 2013), often assigning different weights in their folk theories of happiness to social ties vs. personal pleasures and achievements (Pflug, 2009; Uchida & Kitayama, 2009).

Consequently, inspired by culturally-informed theories of subjective well-being (Diener, Oishi, & Lucas, 2003), we extended the range of outcomes examined in relation to purchases and included participants’ emotional experiences and cognitive evaluations of the impact of their spending on their lives. Furthermore, since the concept of self and how it relates to others is highly variable across cultures, with important implications for

domains such as life satisfaction (Suh, 2000; Uchida, Kitayama, Mesquita, Reyes, & Morling, 2008), in our outcome measures we distinguish between self-focused vs. other-focused emotions and cognitive evaluations of the purchase.

Study Overview

The present study aims to address two primary research questions: (a) Does the experiential advantage generalize beyond WEIRD samples? (b) What are the emotional and cognitive evaluations associated with different purchase types, and how universal or culture-specific are these outcomes? To examine these questions, we made theory-driven decisions concerning sampling and methodology. The samples were chosen based on accessibility and, as Norenzayan and Heine (2005) recommend, a plan to achieve high divergence in a wide range of relevant constructs. The three cultures are highly diverse in terms of access to resources, ideological and social norms related to materialistic values (Mehran, 1989; Ong, Kamaruddin, Bulathsinghalage, & Seneviratne, 2013), and established cultural dimensions such as individualism-collectivism (see Table 1). The considerable divergence among these samples makes them good candidates for a “severe test” of the experiential advantage hypothesis (Dienes, 2008; Mayo, 2010). In deciding the design features of the study, our goal was to control for the social (vs. solitary) aspect of the purchases across cultures in order to facilitate the cross-cultural comparisons of the experiential advantage. As such, we chose Caprariello and Reis’s (2013) 2 X 2 structure in which the material-experiential dimension is crossed with the solitary-social dimension.

The two non-US samples in this study are understudied, even within the cross-cultural literature (Veillard, 2017). Consequently, we did not generate culture-specific hypotheses. Instead, we planned to test the experiential advantage as it is documented in the US in all three cultures with the methodological sensitivity to discover cross-cultural variations and similarities (Rozin, 2001). To capture both culture-specific and universal outcomes associated with purchases, in addition to happiness, we examined self-focused (e.g., pride) and other-focused (e.g., gratitude) emotions, as well as cognitive evaluations of the impact of the purchase on different domains of life, categorized as self-elevation (e.g., “reflection of one’s identity”) and relational enhancement (e.g., “improving one’s friendships”).

Method

Participants

Sample size determination. A review of seven studies on the primary effect of interest (i.e., a comparison of experiences vs. materials; Carter & Gilovich, 2010; Howell & Hill, 2009; Millar & Thomas, 2009; Pchelin & Howell, 2014; Van Boven & Gilovich, 2003; Zhang, Howell, Caprariello, & Guevarra, 2014) revealed effect sizes (Cohen’s d) ranging from 0.25 to 0.57 ($M = 0.46$, $Mdn = 0.49$). Consequently, we based our calculations on a small-to-moderate effect size of $d = 0.35$. For this effect size, a minimum sample of 428 subjects is needed to obtain 95% power (Faul, Erdfelder, Buchner, & Lang, 2009). Since Caprariello and Reis (2013) has shown that specifying the solitary-social dimension of the purchase reduces participants’ compliance, we set our target sample size to be a minimum of 500 per country. After collecting half of the

sample in Iran, a review of completion rates indicated an approximate 20% attrition, which might be due to higher incidence of disruptions in the internet connection¹. To compensate for this issue and ensure that the target statistical power is achieved, a proportionally larger sample was collected from Iran.

US sample. Undergraduate psychology students ($n = 516$, $M_{age} = 21.08$, $SD_{age} = 5.61$; 72.3% female, 26.2% male) at a public university in the southern US completed the study online in exchange for course credit. Participants identified as Caucasian (46.5%), African American (33.6%), Asian/Asian American (6.1%), Hispanic (5.7%), more than one ethnicity (5.5%), Middle Eastern (1.6%), and other (1.2%). Based on responses on the MacArthur scale of subjective social status (Adler & Stewart, 2007), 43.2% identified as middle class (ladder rungs five and six), 20.7% identified as lower-to-middle class (rungs one to four), and 35.4% as middle-to-higher class (rungs seven to ten).

Iranian sample. Community adults ($n = 670$, $M_{age} = 32.45$, $SD_{age} = 9.52$; 50.6% female, 24.0% male) who learned about the study through popular socio-cultural channels on the Telegram app.² completed the study online in exchange for personality feedback. Of the 490 participants who reported their education level, 43.5% were undergraduate students or had a bachelor’s degree, 42.3% were graduate students or had a graduate degree, and the remaining (14.1%) had a high school diploma, pre-university, or an associate degree. To avoid any potential cultural sensitivity, ethnicity data were not collected from this sample. Twenty-seven percent identified as middle class, 11.5% identified as lower-to-middle class, and 36.9% as middle-to-higher class.

Malaysian sample. Undergraduate psychology students ($n = 532$, $M_{age} = 22.98$, $SD_{age} = 5.07$; 77.1% female, 19.4% male) at a private university in Kuala Lumpur completed the study in pen-and-paper mode in exchange for course credit or a chance to participate in a raffle. Participants identified as Chinese (78.8%), Indian (9.5%), Malay (8.6%), and other (3.1%), and completed the study in English, which is one of Malaysia's official languages of tertiary education (Puteh, 2010). Majority (54.4%) identified as middle class, 18.4% identified as lower-to-middle class, and 23.7% as middle-to-higher class.

Procedure and Materials

In a 2 (experiential vs. material) X 2 (social vs. solitary) between-subjects design, participants were randomly assigned to one of four conditions (i.e., material-solitary, material-social, experiential-solitary, experiential-social). The instructions required participants to recall and write about a non-essential purchase that they made with the intention of advancing their happiness. Depending on the experimental condition, participants were asked to write about either a material ("a physical, tangible object") or an experiential ("a life experience or event that did not result in a possession of a physical object, but a memory") purchase. Furthermore, instructions also specified the solitary (e.g., "a material possession to use by yourself") or social (e.g., "a material possession to use with at least one other person") aspect of the purchase. The instructions were inspired by past studies in the US (e.g., Caprariello & Reis, 2013; Van Boven & Gilovich, 2003). However, to ensure cultural and linguistic equivalence, we consulted seven cultural informants from Iran and Malaysia and adjusted the instructions based on their

feedback. The final prompts were identical in all countries, except for the price range³ that was provided using each country's currency (see Online Supplement).

Positive emotional experience. After writing about the purchase, participants rated their positive emotional experience while reviewing the memory of their purchase using the positive items from Impett et al. (2010) that includes self-focused emotions (4 items; $\alpha = 0.78$; e.g., "proud/good about myself") and other-focused emotions (4 items; $\alpha = 0.80$; e.g., "grateful/appreciative/thankful"). Participants reported how much they experienced each emotion on a 5-point scale ("Not at all" to "A lot"). For sample-specific internal consistency coefficients, see Table 5.

Instant happiness. A single item (i.e., "Compared to how you felt right before you spent your money, how much happier were you right after your purchase?") was used to measure participants' immediate happiness from the purchase (response anchors for happiness items: 1 = "Not at all"; 4 = "Moderately"; 7 = "Very much").

Overall happiness. Two items (e.g., "How much has this purchase contributed to your overall life happiness?") measured participants' evaluation of the contribution of the purchase to their well-being ($\alpha = 0.90$).

Cognitive evaluations. Participants completed eight evaluative items that were developed based on potential effects of purchases on different life domains, including psychological need satisfaction (Deci & Ryan, 1985; Johnston & Finney, 2010). Some items captured the self-focused goals associated with purchases (e.g., "This purchase reflected my true identity"), and others reflected relational goals (e.g., "This purchase helped me make new friends or strengthen existing

friendships.”). A Principal Component Analysis (PCA) of the items supported this two-component structure: Self-elevation (four

items; $\alpha = 0.82$) and Relational-enhancement (four items; $\alpha = 0.76$; see Table 2).

Table 2.

Results of the PCA of the General Evaluations Items

Item	Component 1	Component 2
This purchase made me feel curious, inquisitive, interested.	0.90	-0.08
This purchase made me feel awe, wonder, and amazement.	0.88	-0.06
This purchase increased my knowledge in one or more areas.	0.81	0.04
This purchase reflected my true identity.	0.55	0.20
This purchase helped me make new friends or strengthen existing friendships.	0.00	0.84
This purchase made me feel more connected to people.	0.04	0.81
This purchase made me feel less lonely.	-0.08	0.73
This purchase created positive memories for me.	0.32	0.52

Note. Loadings above 0.40 are in bold. Oblimin rotation with Kaiser normalization was used. The KMO’s measure of sampling adequacy was .84, and extraction communalities ranged from .45 to .75. The two components explained 63.05% of sums of squared loadings and were correlated at .54. These results are based on PCA on the whole sample. PCA and CFA results for each sample, as well as the results of the measurement invariance analyses are reported in the Online Supplement.

Negative outcomes. We included three negative outcomes for exploratory purposes: negative self-focused emotions (4 items; $\alpha = 0.70$; e.g., “sad/depressed/down”), negative other-focused emotions (2 items; $\alpha = 0.56$; e.g., “criticized/blamed”), and regret about the purchase (3 items; $\alpha = 0.68$). These outcomes had negligible variability (e.g., the median response to all negative emotion items was one (i.e., “not at all”), suggesting that the present design, like most studies in this literature, elicited primarily successful purchases (Nicolao, Irwin, & Goodman, 2009). As such, these outcomes are not reported any further; however, the data is publicly available for further investigation.

Purchase characteristics. Participants were given a list of 20 purchase categories (e.g., “Beauty products”) and asked which one best

describes their purchase. Furthermore, as a manipulation check, participants reported the extent to which they considered their purchase to be non-essential (1: “Absolutely essential”; 5: “Completely non-essential”) and the extent to which they considered the purchase to be material or experiential (1: “Only material”; 5: “Only experiential”). Next, participants reported the price and the time elapsed since the purchase.

Results

Data exclusion. Prior to analyses, two researchers reviewed all the purchase narratives and, following predetermined rules, excluded the cases that did not follow instructions⁴. Narratives were excluded if both researchers agreed that (a) the narrative does not report a purchase, or (b) the reported purchase is not a

non-essential purchase (e.g., paying the rent), or (c) there is information in the narrative that deems the purchase inconsistent with the social-solitary or material-experiential dimension of the instructions (e.g., a narrative describing a trip with a group of friends written by a participant assigned to the experiential-solitary condition). Data exclusion decisions were reviewed by a third researcher outside the author team to ensure that the decisions are justified. Overall, 10.8% of the 1718 observations were excluded. The exclusion rates did not differ across samples (Malaysia: 10.9%, Iran: 9.3%, US: 12.6%, $\chi^2(2, n = 1718) = 3.41, p = .182$). However, similar to Caprariello and Reis (2013), non-compliance rates were significantly higher for the experiential-solitary (21.9%) and material-social (10.8%) conditions compared to material-solitary (5.0%) and experiential-social (5.2%) conditions ($\chi^2(3, n = 1718) = 84.42, p < .001$)—an important caveat to consider when interpreting the following results (West & Sagarin, 2000). Results without any data exclusion have a similar pattern (see Online Supplement).

Purchase characteristics. A summary of the purchase characteristics is presented in Table 3. Importantly, median purchase price was 89,000 Tomans in Iran (Winsorized $SD = 232,936$), RM76.45 in Malaysia (Winsorized $SD = 130.10$), and \$50.00 in the US (Winsorized $SD = 72.47$). For examples of purchases in each country, and a visual representation of purchase categories, see the Online Supplement. The price of the different types of purchase was not significantly different in Iran, but was so in Malaysia and the US where participants' reported material purchases (especially material-solitary ones) were more expensive than experiential purchases.

However, controlling for price (standardized within each country) in the main analyses did not influence the results (see <https://osf.io/n39gj/>). Median time elapsed since purchase was 21 days (Winsorized $SD = 34$), and there was no significant difference between conditions (Table 3) or countries (Welch's $F(2, 924.4) = 2.82, p = .060$).

A comparison of participants' ratings of how material or experiential they consider the purchase to be indicated that, as expected, those in the experiential condition rated the purchase as more experiential ($d = 1.82$). Finally, participants' self-ratings of how non-essential the purchase was indicated that the purchases were generally considered to range from partly to completely non-essential ($M = 3.72, Mdn = 4, SD = 1.34$). Within this range, experiential-social purchases were perceived as more non-essential than other purchases (Table 3).

Table 3.
Purchase Characteristics

		Material		Experiential		Inferential test ¹
		Solitary	Social	Solitary	Social	
<i>Price²</i>						
	Iran	66,000 (231,182)	119,000 (386,566)	80,000 (153,491)	60,000 (146,170)	$F(3, 266) = 2.31, p = .076, \eta^2 = .01$
	Malaysia	155.00 (340.21)	87.50 (104.45)	40.25 (75.93)	49.70 (112.30)	$F(3, 237) = 3.99, p = .009, \eta^2 = .04$
	US	80.50 (124.70)	60.13 (97.75)	32.50 (37.33)	29.79 (37.92)	$F(3, 239) = 5.30, p = .002, \eta^2 = .01$
<i>Time elapsed (days)</i>						
	Iran	20 (24.50)	28.5 (40.33)	60 (77.10)	15 (32.76)	$F(3, 270) = 1.05, p = .373, \eta^2 = .01$
	Malaysia	26 (33.37)	20 (27.25)	20 (25.72)	10 (22.87)	$F(3, 235) = 0.31, p = .820, \eta^2 = .01$
	US	30 (31.56)	21 (31.04)	17 (30.57)	15 (31.17)	$F(3, 240) = 0.85, p = .466, \eta^2 = .01$
	Total	25 (30.84)	24 (48.17)	21 (33.42)	14 (29.18)	$F(3, 764) = 0.86, p = .459, \eta^2 = .01$
<i>Mat. vs. Exp.</i>						
	Iran	2.04 (1.30)	2.02 (1.29)	4.28 (1.14)	4.50 (0.97)	$t(381) = 19.95, p < .001, d = 2.01$
	Malaysia	2.45 (1.08)	2.33 (1.05)	4.19 (1.05)	4.22 (1.00)	$t(435) = 18.28, p < .001, d = 1.75$
	US	1.93 (0.99)	2.15 (1.16)	3.88 (1.33)	4.28 (1.22)	$t(415) = 18.40, p < .001, d = 1.75$
	Total	2.12 (1.15)	4.10 (1.19)	2.18 (1.16)	4.33 (1.08)	$t(1260) = 32.39, p < .001, d = 1.82$
<i>Non-essential</i>						
	Iran	3.78 (1.34)	3.48 (1.42)	4.07 (1.23)	4.26 (1.08)	$F(3, 190) = 7.01, p < .001, \eta^2 = .05$
	Malaysia	3.25 (1.31)	3.22 (1.31)	3.45 (1.36)	3.59 (1.44)	$F(3, 252) = 1.91, p = .129, \eta^2 = .01$
	US	3.70 (1.22)	3.94 (1.28)	3.79 (1.32)	4.25 (1.31)	$F(3, 243) = 4.06, p = .008, \eta^2 = .03$
	Total	3.58 (1.31)	3.74 (1.33)	3.55 (1.36)	4.01 (1.33)	$F(3, 695.8) = 8.73, p < .001, \eta^2 = .02$

Notes. For the highly skewed variables (i.e., price and time elapsed), medians and Winsorized *SDs* (in parentheses) are reported. For the other variables, mean and *SDs* (in parentheses) are reported. *Mat. vs. Exp.* refers to participants' subjective continuous ratings of the purchase as a material or an experience. *Non-essential* refers to how much participants rate the purchase as essential or non-essential.

¹ All tests are Welch's tests (not assuming equal variance). Welch's t-tests for the *Mat. vs. Exp.* ratings compare material and experiential purchases (collapsing across the solitary-social dimension) because this manipulation check item was intended for the comparison between those in the experiential (vs. material) groups.

² Prices are reported based on local currency (i.e., Toman for Iran, RM for Malaysia, and USD for the US). These three countries have different patterns of inflation and variability in consumer prices over time (The World Bank Data, 2019d), with Iran having a particularly high instability in consumer price indices and currency exchange rate over time (Aizenman, Chinn, & Ito, 2013). Consequently, we refrain from converting the currencies and directly comparing them across countries. For examples of purchases in each country, see the Online Supplement.

Material vs. Experiential. To examine the experiential advantage across outcomes, three linear mixed-effects models with different outcome variables were conducted using the R-package *lme4* (Bates, Mäechler, Bolker, & Walker, 2015). In each model, purchase type (material vs. experiential) and country (Iran, Malaysia, and US) were entered as the between-subjects and one of the three outcome categories (i.e., happiness, emotions, or evaluations) were entered as the within-subjects (intercept nested within participants) predictors. Results of the contrast analyses (Table 4) demonstrate that Iranian participants assigned to the experiential purchase condition reported higher overall happiness, higher self-focused and other-focused positive emotions. None of these effects were present in Malaysia.

In the US, there was only a weak positive association between experiential purchases and positive other-focused emotions.

However, in all three samples, experiential purchases were positively associated with relational enhancement, and this was the largest effect observed within each country. Experiential purchases were positively associated with self-elevation among participants from Iran and Malaysia, but not the US. Overall, based on the comparison of these marginal means, the positive relationship between experiential (vs. material) purchases and relational enhancement is robustly replicated across countries. However, other associations seem to be smaller and culture-specific.

Table 4.

Comparison of Happiness, Emotions and Evaluations Associated with Material vs. Experiential Purchases

	Iran	Malaysia	US
Happiness			
Instant happiness	0.00 [-0.30, 0.29]	-0.03 [-0.34, 0.29]	-0.09 [-0.41, 0.23]
General happiness	0.54 [0.24, 0.83]	0.24 [-0.07, 0.56]	-0.16 [-0.48, 0.16]
Emotions			
Positive self-focused	0.37 [0.19, 0.54]	0.10 [-0.10, 0.29]	0.11 [-0.09, 0.31]
Positive other-focused	0.40 [0.22, 0.57]	0.15 [-0.04, 0.35]	0.20 [0.01, 0.40]
Evaluations			
Self-elevation	0.71 [0.51, 0.92]	0.27 [0.06, 0.49]	0.19 [-0.03, 0.41]
Relational enhancement	0.86 [0.66, 1.06]	0.55 [0.33, 0.76]	0.61 [0.39, 0.83]

Notes. In all models, the purchase type predictor was coded as Material = -1 and Experiential = 1. Unstandardized *b* coefficients and their 95%CI [in brackets] are presented here. Confidence intervals were adjusted using a multivariate exact Tukey method correcting for the number of tests in each family within each country. Estimates in bold have $p < .05$. Pattern of results remain the same when controlling for price or time elapsed since purchase (see <https://osf.io/n39gj/>).

Comparison of the four purchase types. Similar to the previous analyses, three linear mixed-effects models were run to test the association between purchase type and the three outcomes. The only difference here was that instead of two levels (material vs. experiential), the purchase type variable consisted of all the four categories, therefore taking into account the solitary-social dimension. Follow-up multiple comparison tests (using Holm-Bonferroni correction) were conducted to examine the difference between categories within each country. Detailed results are presented in Table 5 and Figure 1.

In short, results indicated no differences between purchase categories in terms of instant happiness, and only small differences in terms of general happiness. Unexpectedly, among the US participants, material-solitary purchases were associated with higher general happiness compared to material-social purchases.

For affiliative outcomes (i.e., other-focused positive emotions and relational enhancement), a consistent trend was observed across countries, with participants in the experiential-social condition reporting the highest positive outcome, and those in the material-solitary condition reporting lowest, or one of the lower, positive outcomes. As one would expect, within each broader purchase category (i.e., material vs. experiential), social purchases were positively associated with affiliative outcomes across all countries. However, it is noteworthy that even among the social purchases, experiential ones were associated with more positive outcomes compared to material purchases, suggesting that the experiential advantage might be due to some unique aspect beyond the social nature of experiences.

The results were less consistent cross-culturally in terms of the self-focused outcomes. An interesting effect was observed among the Iranian sample such that experiential-solitary purchases (compared to other categories) were associated with the highest self-elevation cognitions. Furthermore, this category elicited stronger self-focused emotions compared to both solitary and social materials. A different trend was observed for Malaysia and the US such that the differences were generally small and non-significant; importantly, the experiential-social advantage over material-solitary was only observed for self-elevation among Malaysian participants. These findings suggest that purchase results vary cross-culturally when measuring self-related outcomes, and they are not always consistent with the experiential advantage hypothesis.

Table 5.

Descriptive Results and Multiple Comparisons of Outcomes Associated with Each Purchase Type in Each Country

		Cronbach's α	Gottman's λ_6	Ave. IIC	Material		Experiential	
					Solitary	Social	Solitary	Social
<i>Instant happiness</i>								
	Iran	-	-	-	4.83 ^a (1.62)	5.04 ^a (1.82)	4.94 ^a (1.91)	4.92 ^a (1.83)
	Malaysia	-	-	-	5.46 ^a (1.12)	5.47 ^a (1.13)	5.35 ^a (1.22)	5.51 ^a (1.14)
	US	-	-	-	5.51 ^a (1.28)	5.22 ^a (1.52)	5.41 ^a (1.51)	5.19 ^a (1.46)
<i>General happiness</i>								
	Iran	.87	.78	.77	3.64 ^a (1.54)	4.09 ^{ab} (1.50)	4.45 ^b (1.56)	4.35 ^b (1.61)
	Malaysia	.89	.81	.81	4.83 ^a (1.32)	4.83 ^a (1.25)	5.04 ^a (1.16)	5.10 ^a (1.27)
	US	.92	.85	.85	4.60 ^a (1.62)	4.06 ^b (1.70)	4.09 ^{ab} (1.92)	4.25 ^{ab} (2.02)
<i>Self-focused emo.</i>								
	Iran	.78	.78	.47	3.32 ^a (1.07)	3.58 ^{ab} (0.98)	3.90 ^c (0.87)	3.77 ^{bc} (0.87)
	Malaysia	.76	.76	.43	3.84 ^a (0.83)	3.86 ^a (0.70)	3.84 ^a (0.80)	4.03 ^a (0.63)
	US	.77	.76	.46	4.10 ^a (0.88)	3.93 ^a (0.90)	4.01 ^a (0.94)	4.22 ^a (0.78)
<i>Other-focused emo.</i>								
	Iran	.77	.76	.46	2.55 ^a (1.06)	3.11 ^b (1.11)	3.04 ^b (1.00)	3.44 ^c (0.90)
	Malaysia	.76	.76	.44	3.23 ^a (0.91)	3.48 ^{ab} (0.75)	3.18 ^a (0.93)	3.78 ^b (0.70)
	US	.86	.87	.61	3.32 ^a (1.17)	3.58 ^a (1.10)	3.35 ^a (1.25)	3.89 ^b (1.00)
<i>Self-elevation</i>								
	Iran	.83	.82	.54	2.26 ^a (1.08)	2.47 ^a (1.06)	3.27 ^b (1.17)	2.90 ^c (1.06)
	Malaysia	.76	.74	.45	3.07 ^a (0.95)	3.16 ^{ab} (0.89)	3.33 ^{ab} (1.01)	3.43 ^b (0.88)
	US	.84	.82	.56	3.11 ^{ab} (1.18)	2.92 ^a (1.16)	2.99 ^a (1.23)	3.39 ^b (1.24)
<i>Relational-enhancement</i>								
	Iran	.71	.70	.38	2.46 ^a (0.91)	3.01 ^b (0.95)	3.42 ^c (0.84)	3.78 ^d (0.80)
	Malaysia	.81	.79	.51	2.87 ^a (0.96)	3.30 ^b (0.96)	3.08 ^{ab} (1.08)	4.07 ^c (0.69)
	US	.80	.79	.49	2.72 ^a (1.00)	3.16 ^b (1.10)	3.00 ^{ab} (1.16)	3.98 ^c (0.97)

Note. Means and SDs are presented for each purchase category. In each row, means that do not share a superscript letter are significantly different at $p < .05$ after Holm-Bonferroni stepwise correction for multiple comparison (Holm, 1979). *Ave. IIC* refers to average inter-item correlation. For General Happiness, this number represents the correlation between the two items measuring the construct. *Self-focused emo.* and *Other-focused emo.* refer to positive self-focused and positive other-focused emotions, respectively. For the exact *b* estimates and p-values, as well as a visual representation of the distribution of p-values, see the Online Supplement. Pattern of results remain the same when controlling for price or time elapsed since purchase (see <https://osf.io/n39gj/>).

Figure 1. Differences between purchase types across countries.

Note. Error bars are standard errors. The theoretical range of responses for the happiness outcomes (top two panels) is one to seven; for the remaining outcomes, the range is one to five.

Discussion

Results from three diverse samples suggest that the benefits associated with different types of purchases are cross-culturally consistent in some domains, and culture-specific in others. The link between experiential purchases and social outcomes, such as positive other-focused emotions and relational enhancement, consistently replicated across cultures and were the largest effects within each sample. Specifically, across these cultures, experiential-social purchases led to better social outcomes compared to other types, including material-social purchases, suggesting that there are unique benefits to experiences beyond their social nature. In contrast, results were less consistent when it came to happiness, self-focused emotions, and self-elevation.

To our knowledge, prior to this study the majority of the literature on experiential spending was based on Western samples. The present study was an initial step in testing the generalizability of the experiential advantage beyond WEIRD samples. While cognizant of the experiential buying literature and cross-cultural theories of self and well-being, our approach to cross-cultural differences at this initial stage followed what Rozin (2001) described as “disciplined description or exploration of the phenomenon” (p. 5). We believe this approach is both necessary and fruitful for future theory development; and the results corroborate this notion. While we found cross-culturally robust relational benefits associated with experiential purchases, we were also able to detect an interesting culture-specific outcome in Iran.

Among Iranians, results demonstrated an unexpected advantage associated with the experiential-solitary purchases—Iranian

participants reported relatively stronger positive self-focused emotions and self-elevation associated with experiential-solitary purchases. This is consistent with Caprariello and Reis’ (2013; study 2) finding that people with stronger preference for solitude ranked solitary experiences higher than social ones. A qualitative review of the Iranian participants’ narratives revealed a theme in which some participants explicitly expressed an appreciation for solitude, a tendency that is also reflected in Iranian art (e.g., Forouzani, 2015) and media (e.g., “Why is solitude beneficial?”, 2016, December 21). Considering the cultural variability in preference for solitude (e.g., Van Zyl, Dankaert, & Guse, 2018), a possible explanation for the observed self-focused results of solitary-experiential purchases among Iranians can be the higher preference for solitude in this culture. This is a potentially important finding because it points out a unique advantage of experiences—in addition to fulfilling the need for relatedness when they are shared with others, experiences may also fulfill the desire for voluntary solitude, especially in cultural contexts where solitude is valued. This conclusion requires future research.

Limitations and Future Directions

The present research had several limitations. First, to compare different purchase types, we used a common methodology in which participants were instructed to recall a past purchase. We controlled two dimensions of the purchase (i.e., material-experiential, and solitary-social) methodologically. However, it is likely that the purchases recalled by the participants vary systematically in other dimensions. This is a potential threat to internal validity and weakens the case for making causal claims. As such, we

encourage caution against causal interpretation of the results. Second, the samples vary in age and education; any between-sample differences should be interpreted with this caveat in mind. Third, the ad-hoc measure of cognitive evaluations is novel and needs further tests of validity.

Finally, for theoretical reasons explained before, our approach to the culture-specific findings was descriptive. As such, the post-hoc explanations provided for the observed

differences should be treated with caution. While the present results provide valuable insights, to make stronger inferences, confirmatory preregistered research in the future is needed (Srivastava, 2018, November 21). Furthermore, future research can benefit from linkage studies (Matsumoto & Yoo, 2006) that examine the role of constructs such as materialism, access to resources, and preference for solitude as the active ingredients driving the differences in purchase outcomes.

Footnotes

1. To investigate whether the attrition rates were related to the experimental condition, observations were classified as *incomplete* (i.e., cases that did not complete any of the last four items before demographics) vs. *complete* (those who responded to at least one the last four items). Chi-square test of independence revealed that dropout rates were not conditional on the type of purchase participants were assigned to, $\chi^2(3, n= 670) = 2.26, p = .520$.
2. Telegram is a popular social network platform in Iran with polls estimating its penetration rate to be as high as 80% (Jafari, 2017).
3. To avoid exceptionally expensive or uncommon purchases, we provided a price range in the instructions. In each country, the lower boundary was the local movie ticket price and the upper boundary was a medium- to high-end Windows laptop. Due to substantial inflation during the data collection in Iran, the upper boundary was adjusted based on weekly prices.
4. Exclusion decisions were made using a dataset that only included participants' condition and their narrative.

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