Fatal (Fiscal) Attraction: Spendthrifts and Tightwads in Marriage

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ABSTRACT

Although much research finds that "birds of a feather flock together," surveys of married adults suggest that opposites attract when it comes to emotional reactions toward spending. That is, "tightwads," who generally spend less than they would ideally like to spend, and "spendthrifts," who generally spend more than they would ideally like to spend, tend to marry each other, consistent with the notion that people are attracted to mates who possess characteristics dissimilar to those they deplore in themselves (Klohnen and Mendelsohn 1998). In spite of this complementary attraction, spendthrift/tightwad differences within a marriage predict conflict over finances, which in turn predict diminished marital well-being. These findings underscore the importance of studying the relationships between money, consumption, and happiness at an interpersonal level.

Keywords: Decision Making, Consumer Behavior, Interpersonal Relationships, Marriage

They strained their chests against enormous weights, and with mad howls rolled them at one another. Then in haste they rolled them back, one party shouting out: "Why do you hoard?" and the other: "Why do you waste?"

-Dante's Inferno, Fourth Circle of Hell: The Hoarders and The Wasters

Money and relationships are strange bedfellows. Depending on the situation, money can either draw people closer together or isolate them completely. Inducing mating goals in males, for example, increases their willingness to spend money on conspicuous luxuries, presumably as an attempt to signal their wealth to potential mates (Griskevicius et al. 2007). However, even nonconscious reminders of money can lead people to physically distance themselves from others (Vohs, Mead, and Goode 2006, Study 7) and reduce their ability to understand the perspective of others (Caruso, Mead, and Vohs 2008). These findings highlight the importance of money in interpersonal contexts, but there is little research linking feelings toward spending money to attraction and relationship satisfaction. In this paper we examine whether feelings toward spending money predict whom people marry, as well as whether and why husband/wife differences in feelings toward spending money influence marital well-being.

The notion that spouses differ in their feelings toward spending money has been present in the consumer behavior literature at least since Ferber and Lee (1974), who found that the spouse who gave "more priority to saving" was most likely to assume the role of "family financial officer." Although these results imply that at least some husbands and wives must differ in their feelings toward spending money, Ferber and Lee (1974) did not explore whether there was any systematic relationship between husbands' and wives' feelings toward spending money. Although subsequent marketing research has shed further light on the dynamics of spousal decision making (e.g., Corfman and Lehmann 1987; Su, Fern, and Ye 2003), the question of whether feelings toward spending money predict mate selection remains an open one. Although the existing consumer behavior literature offers few clues regarding the relationship between spouses' feelings toward spending money, the attraction literature in social psychology appears to offer a clear prediction. Social psychologists have frequently found that people tend to select spouses with similar demographic characteristics, similar attitudes, similar values, and even similar names (see Jones et al. 2004). Indeed, in their comprehensive review of this literature, Watson et al. (2004) observed that the vast majority of evidence is consistent with the notion that "birds of a feather flock together" (a pattern also known as "positive assortment"), with very little evidence suggesting that "opposites attract" (also known as "complementarity"). These findings suggest that people with similar feelings toward spending money will be attracted to one another.

Yet, despite the overwhelming evidence suggestive of positive assortment, similarity may not be a universal principle of mate selection. Rather, one important moderator is whether individuals like versus dislike a trait in themselves. Klohnen and Mendelsohn (1998) argue that complementarity is likely to be observed for characteristics we deplore in ourselves. Though people may be attracted to others who possess characteristics similar to those they value in themselves (Freud 1914/1957), for "disliked aspects of the self," dissimilarity should be most appealing (Klohnen and Mendelsohn 1998, p. 269; cf. Heider 1958, p. 186). Indeed, Klohnen and Mendelsohn (1998, p. 273) found that similarity to one's partner on a given dimension was positively related to the individual's satisfaction with his or her own location on that dimension. This moderation suggests that people who are unhappy with their feelings toward spending money should be attracted to people who have dissimilar feelings toward spending money.

Of course, such reasoning—as applied to feelings toward spending money—is irrelevant from the standard economic perspective, since people should be neither satisfied nor dissatisfied with their feelings toward spending money. Economists typically conceptualize spending decisions as a simple tradeoff between costs and benefits occurring at different points in time. When deciding whether or not to make a purchase, people presumably compare the expected pleasure of consuming the good under consideration to the expected pleasure of the next best use of the money (the good's opportunity cost; Becker, Ronen, and Sorter 1974). Individuals may differ in the extent to which they discount future flows of utility (Samuelson 1937), but beyond that, individual differences in feelings toward spending money are not considered.

In contrast to the standard economic view, behavioral decision research suggests that people are often unable to spontaneously assess opportunity costs (Frederick et al. 2007; Jones et al. 1998). Both behavioral and neuroeconomic evidence indicates that people therefore rely on negative emotion—specifically, a "pain of paying"—as a proxy for opportunity costs when making spending decisions (Knutson et al. 2007; Prelec and Loewenstein 1998). However, because pain is only a crude proxy for opportunity costs, some people may chronically spend more or less than they would have had they relied on consideration of opportunity costs to deter their spending (Rick, Cryder, and Loewenstein 2008). Individuals differ in their tendency to experience a pain of paying, and Rick et al. (2008) refer to people on opposing ends of the continuum as "spendthrifts" and "tightwads." Spendthrifts do not experience enough pain for their own good, leading them to generally spend more than they would ideally like to spend. Tightwads, by contrast, experience too much pain for their own good, leading them to generally spend less than they would ideally like to spend.

Rick et al. (2008) demonstrated, with a sample of over 13,000 adults, that individual differences in the tendency to experience a pain of paying can be reliably measured with a simple self-report scale. Individual differences on this "Tightwad-Spendthrift" scale strongly predicted

savings and credit card debt, but were unrelated to income. Discriminant validity analyses revealed that the Tightwad-Spendthrift scale is distinct from several related constructs, such as self-control, impulsivity, regulatory focus, frugality, and materialism, among others.

Building on Klohnen and Mendelsohn's (1998) logic, one reason why people with opposing feelings, or emotional reactions, toward spending (i.e., tightwads and spendthrifts) might attract is that they are likely to deplore these emotional reactions in themselves (cf. Kivetz and Simonson 2002; O'Guinn and Faber 1989). Indeed, achieving a very high or very low Tightwad-Spendthrift scale score (indicative of spendthriftiness or tightwaddism, respectively) is only possible if respondents indicate some divergence between their typical spending behavior and their desired spending behavior. Rick et al. (2008) therefore referred to people who are neither tightwads nor spendthrifts as "unconflicted" consumers. If tightwads and spendthrifts are dissatisfied with their typical emotional reactions toward spending, tightwads and spendthrifts should be attracted to one another (Klohnen and Mendelsohn 1998):

H1: The correlation between the Tightwad-Spendthrift scale scores of husbands and wives will be negative.

Given that spending decisions are a common source of marital conflict (Madden and Janoff-Bulman 1981; Smock, Manning, and Porter 2005, p. 692), and that conflict is a common source of marital dissatisfaction (e.g., Locke and Wallace 1959), it is important to consider whether the hypothesized complementary attraction will ultimately be beneficial for relationships. Although Klohnen and Mendelsohn's (1998) logic makes clear predictions regarding initial partner selection, it makes no predictions regarding the implications of partner selection for relationship well-being. Indeed, Klohnen and Mendelsohn (1998) did not measure relationship satisfaction in their study, as there were no clear predictions to test. Most research about marital disputes over money has focused on how couples cope with an acute financial crisis (e.g., recent unemployment) or with economic hardship more generally (Conger, Rueter, and Elder 1999). Yet much anecdotal evidence suggests that disputes about money are not limited to couples who are struggling to make ends meet (e.g., Bernard 2008). Given that spousal dissimilarity tends to be positively related to marital conflict (e.g., Luo and Klohnen 2005, p. 314), spouses who differ in their emotional reactions toward spending (i.e., experiencing high versus low pain when contemplating spending) may be particularly vulnerable to disputes over money, independent of their financial constraints. Combined with the common finding that marital conflict is negatively related to marital well-being (Locke and Wallace 1959; Luo and Klohnen 2005; Watson et al. 2004), our reasoning leads to the following hypothesis:

H2: Complementary emotional reactions toward spending money among husbands and wives will be associated with greater conflict over finances, which will in turn be associated with diminished marital well-being.

Although we advance H2 a priori, we are open to the possibility that the opposite pattern could emerge. For example, tightwads and spendthrifts are generally unhappy with their emotional reactions toward spending, and complementary attraction may benefit both spouses if they help each other overcome their prepotent emotional reactions toward spending (i.e., if the tightwad can help the spendthrift become less of a spendthrift and if the spendthrift can help the tightwad become less of a tightwad). It may therefore be the case that tightwad and spendthrift spouses argue the least over money and thus have the greatest marital well-being. Of course, even if tightwad and spendthrift spouses can "repair" each other's emotional reactions toward spending, the repairs themselves may not be painless. That is, tightwad and spendthrift spouses may argue the most over money, but ultimately reach satisfying spending decisions and thus have the greatest marital well-being. We will allow the data to determine the precise nature of

the relationship between complementary attraction and conflict over money and marital wellbeing.

OVERVIEW OF THE PRESENT RESEARCH

To summarize, we predict that people with opposing emotional reactions toward spending money will attract, but that this complementary attraction is ultimately bad for their marriage. We initially test our hypotheses by asking married adults to assess both their own and their spouse's emotional reactions toward spending, the extent to which they and their spouse argue over money, and their marital well-being. Because people may imperfectly assess their spouse's emotional reactions toward spending (cf. Davis, Hoch, and Ragsdale 1986; Lerouge and Warlop 2006), we next test our opposites-attract hypothesis by asking both spouses within a marriage to assess only their own emotional reactions toward spending.

Finally, we seek further insight into why distaste for one's emotional reactions toward spending increases the appeal of mates with opposing emotional reactions toward spending. One possibility is that tightwads and spendthrifts actively seek their opposites, perhaps as a conscious attempt to find someone who can help them overcome their normal emotional reactions toward spending (e.g., tightwads may seek spendthrifts because they think spendthrifts would help them behave less like a tightwad, and vice versa). Alternatively, people may simply find potential mates with opposing emotional reactions toward spending most appealing when they encounter them, without a deliberate attempt to seek out their opposite on this dimension. We examine whether people actively seek their opposite by asking unmarried people to indicate their ideal romantic partner's emotional reactions toward spending.

Study 1

Study 1 served several purposes. We first wanted to more closely examine Rick et al.'s (2008) claim that tightwads and spendthrifts are most dissatisfied with their typical emotional reactions toward spending. Although Rick et al. (2008) classified people who were neither tightwads nor spendthrifts as "unconflicted" consumers, they did not directly examine whether tightwads and spendthrifts experienced greater conflict over spending money than unconflicted consumers. This question is important because we should only expect opposites to attract if tightwads and spendthrifts find their own feelings and behavior to be objectionable.

Next, we examined whether opposites attract, by asking married respondents to complete the Tightwad-Spendthrift scale for themselves and, later, for their spouse. We also examined whether the extent to which people were dissatisfied with their own emotional reactions toward spending predicted the degree to which their spouse had opposing emotional reactions toward spending.

Finally, we examined whether husband/wife differences in emotional reactions toward spending predicted the extent to which spouses argued over money, and whether those arguments in turn predicted marital well-being.

Participants. In early 2007, the *TierneyLab* web log on *The New York Times* website posted a survey about spending and saving. Respondents gave their email address if they were willing to be contacted about future surveys, and in late 2008, 1,758 respondents were emailed and asked to take a new spending survey. Only 1,644 respondents actually received the email, as 114 of the email addresses given in 2007 were no longer valid. The original 2007 survey did not concern marriage, and there was no indication that the new survey concerned marriage until marriage-related questions appeared at the end of the survey. Thus, it is doubtful that the survey

was particularly attractive to people who perceived spending to be a problem in their marriage and wanted to learn more about it. Respondents were not paid to participate; their only incentive was receiving a report of the study's results once it had concluded.

A total of 916 people responded, but our analyses will focus on the 458 married respondents who completed all marriage-related questions (48% female; age range: 24-83, M = 47.3). Married respondents' median gross household income fell between \$125,000 and \$150,000. Marital length ranged from less than one year to 61 years (M = 15.6). Married respondents had between zero and eight children (M = 1.4).

Procedure. Participants initially completed Rick et al.'s (2008) Tightwad-Spendthrift scale ($\alpha = .78$). The scale consists of four items that assess the extent to which respondents experience emotional distress when contemplating spending money.

Next, to more closely examine Rick et al.'s (2008) claim that tightwads and spendthrifts are more dissatisfied with their emotional reactions toward spending than unconflicted consumers, we asked respondents the following two questions:

Sometimes we react emotionally toward the prospect of spending money. For example, the prospect of spending money may make us anxious, or perhaps excited. If you could change your typical emotional reactions toward spending money, would you? (1-7 scale, where 1 = absolutely not and 7 = absolutely)

Sometimes buying decisions make us feel conflicted. For example, we may want to buy something, but the anxiety we feel when contemplating spending keeps us from buying it. Or we may want to avoid buying something, but we buy it anyway and later regret it. How often do spending decisions make you feel conflicted? (1-7 scale, where 1 = never and 7 = always)

Responses correlated highly with one another (r(456) = .51; p < .0001) and will therefore be

averaged to form a "conflicted about spending" index.

Participants then answered some unrelated questions and provided demographic

information. Married participants continued to a second part of the survey that asked them about

their marriage. Marital well-being was assessed using a 3-item scale ($\alpha = .82$) modified from Locke and Wallace's (1959) Marital-Adjustment Test, a widely used measure of marital wellbeing. To measure the extent to which money was a source of conflict in their marriage, participants then rated their agreement (on 1-5 scales; [R] indicates that the item was reversescored) with the following 10 statements ($\alpha = .90$):

It is hard for me and my spouse to discuss our finances without getting upset at each other. [R]

When it comes to our finances, my spouse and I see eye to eye.

Money is a constant source of conflict with my spouse. [R]

I am satisfied with my spouse's attitudes toward money.

My spouse is satisfied with my attitudes toward money.

I am dissatisfied with how frequently (or infrequently) my spouse wants to spend money. [R]

The way my spouse and I handle our finances is in serious need of improvement. [R]

I wish I could change my spouse's attitudes toward money. [R]

My spouse wishes (s)he could change my attitudes toward money. [R]

I have sought (or considered seeking) counseling for the financial problems in my marriage. [R]

Finally, we asked respondents to assess their spouse's typical emotional reactions toward spending money, by completing the 4-item Tightwad-Spendthrift scale for their spouse ($\alpha = .84$). We simply replaced all references to "you" with references to "your spouse."

Results. First, we examined whether tightwads and spendthrifts were most dissatisfied with their emotional reactions toward spending money (i.e., whether there was a curvilinear relationship between Tightwad-Spendthrift scores and conflicted about spending index scores). We first regressed conflicted about spending index scores on Tightwad-Spendthrift scores (which we will refer to as Self TW-ST), and then we regressed conflicted about spending index scores on Self TW-ST and squared Self TW-ST. The curvilinear model fit significantly better

than the linear model (F(1,456) = 32.3; p < .0001). Indeed, when we separated respondents into three categories (tightwads: TW-ST scores from 4 to 11; unconflicted consumers: TW-ST scores from 12 to 18; spendthrifts: TW-ST scores from 19 to 26), according to Rick et al.'s (2008) scoring protocol, we found that unconflicted consumers had significantly lower conflicted about spending index scores than both tightwads (3.46 vs. 3.82; t(398) = 2.64; p < .01) and spendthrifts (3.46 vs. 4.17; t(322) = 3.65; p < .001). Conflicted about spending index scores did not differ significantly between tightwads and spendthrifts (p > .10).¹ Our results are thus consistent with Rick et al.'s (2008) claim that tightwads and spendthrifts are particularly dissatisfied with their emotional reactions toward spending money.

Next, we examined whether opposites attract. We found that the correlation between Self TW-ST and the spouse's TW-ST score (which we will refer to as Spouse TW-ST) was negative and significant (r(456) = -.11; p < .02), consistent with the hypothesis that people tend to marry partners with opposing emotional reactions toward spending (H1). Although not enormous, this negative correlation strongly contrasts with prior research, where "the accumulating data overwhelmingly support the existence of positive assortment" (Watson et al. 2004, p. 1030). Yet it is consistent with the theory that for disliked aspects of the self, complementarity is the rule (Klohnen and Mendelsohn 1998).

To examine whether this pattern reflected complementary attraction or divergence of emotional reactions toward spending over time, we regressed Spouse TW-ST on Self TW-ST, Marriage Length, and a Self TW-ST × Marriage Length interaction. There was a significant main effect of Self TW-ST (β = -.20; p = .02), no significant main effect of Marriage Length (β = -.07; p = .28), and, most importantly, no significant interaction (β = .004; p = .42). Thus, the data do not suggest divergence over time, but rather appear consistent with complementary attraction.

We have thus far established that tightwads and spendthrifts are most dissatisfied with their emotional reactions toward spending and that tightwads and spendthrifts tend to be attracted to one another. These findings raise the question of whether tightwads and spendthrifts are attracted to one another because they are unhappy with their emotional reactions toward spending. To answer this question, we need to assess the extent to which participants have married someone unlike themselves. Absolute difference scores between Self TW-ST and Spouse TW-ST are not ideal here, because a given absolute difference can either reflect the selection of qualitatively similar or dissimilar mate.

To illustrate, imagine a person with a TW-ST score of 11 (a tightwad, according to Rick et al.'s (2008) scoring protocol). If this person marries someone with a TW-ST score of 4 (another tightwad), the absolute difference between their TW-ST scores is 7. Alternatively, if this person marries someone with a TW-ST score of 18 (an unconflicted consumer that nearly classifies a spendthrift), the absolute difference between their TW-ST scores is also 7. Although the absolute difference between spouses' TW-ST scores is identical in both cases, the qualitative difference is arguably stronger when the tightwad marries someone who is nearly a spendthrift than when the tightwad marries another tightwad.

Thus, we computed what we call "difference in opposite direction" scores. The way the difference in opposite direction score was computed depended on whether Self TW-ST was above or below the midpoint of the Tightwad-Spendthrift scale. In this analysis only, we excluded the 37 participants whose TW-ST score was at the midpoint (15). For people on the tightwad end of the continuum (Self TW-ST < 15), we computed Spouse TW-ST – Self TW-ST. For people on the spendthrift end of the continuum (Self TW-ST > 15), we computed Self TW-ST.

ST – Spouse TW-ST. In both cases, positive difference in opposite direction scores reflect the selection of mates with opposing emotional reactions toward spending.²

Conflicted about spending index scores correlated positively and significantly with difference in opposite direction scores (r(419) = .29; p < .0001), suggesting that the more dissatisfied people are with their own emotional reactions toward spending, the more likely they are to be attracted to people with opposing emotional reactions toward spending. Of course, one concern here is reverse causality: perhaps being married to someone with different emotional reactions toward spending makes people feel bad about their own emotional reactions toward spending (e.g., because their spouse complains about their spending, or lack of spending). However, if we focus our analysis on the 41 newlyweds in our sample (married a year or less), the correlation between conflicted about spending index scores and difference in opposite direction scores was r(39) = .52 (p < .0001), marginally greater than the correlation in the entire sample (z = 1.64; p = .10). Although we did not measure how long respondents had dated before getting married, most newlywed spouses presumably have had only a limited amount of time to influence how their mate feels about his or her emotional reactions toward spending. The newlywed result thus provides additional, albeit tentative, support for the claim that dissatisfaction with one's emotional reactions toward spending increases the appeal of mates with opposing emotional reactions toward spending.

Thus, we have evidence that tightwads and spendthrifts are most dissatisfied with their emotional reactions toward spending, and this dissatisfaction contributes to their attraction to mates with opposing emotional reactions toward spending. Next, we examine the implications of this complementary attraction for the quality of the marriage. Recall that, consistent with earlier evidence suggesting that dissimilarity stimulates conflict (e.g., Luo and Klohnen 2005), and

other evidence suggesting that conflict diminishes martial well-being (e.g., Watson et al. 2004), our hypothesis was that spendthrift/tightwad differences will predict arguments over finances and that marital well-being will ultimately suffer (H2).

To test our hypothesis, we performed the standard four-step mediation analysis proposed by Baron and Kenny (1986). To operationalize spendthrift/tightwad differences within the marriage, we computed the absolute difference between Self TW-ST and Spouse TW-ST, rather than using the difference in opposite direction scores discussed above. For mediational analyses, absolute difference scores are preferred to difference in opposite direction scores, as the former should relate linearly to conflict over finances, while the latter should relate nonlinearly to conflict over finances (differences in either direction should lead to conflict over money, even though differences in the opposite direction should be more damaging³). Financial Harmony was operationalized as the average of the ten responses to the financial disagreement items discussed earlier. Marital Well-Being was operationalized as the average of the three responses to the abbreviated version of the Marital Adjustment Test (Locke and Wallace 1959).

Results from the mediation analysis are depicted in Figure 1. In Step 1, we regressed Marital Well-Being on |Self TW-ST – Spouse TW-ST|, which revealed that |Self TW-ST – Spouse TW-ST| significantly predicted Marital Well-Being (standardized β = -.16; *t*(456) = -3.56; *p* < .001). In Step 2, we regressed Financial Harmony on |Self TW-ST – Spouse TW-ST|, which revealed that |Self TW-ST – Spouse TW-ST| significantly predicted Financial Harmony (standardized β = -.48; *t*(456) = -11.78; *p* < .001). In Step 3, we regressed Marital Well-Being on Financial Harmony and |Self TW-ST – Spouse TW-ST|. Financial Harmony was significantly associated with Marital Well-Being (standardized β = .46; *t*(455) = 9.49; *p* < .001), but |Self TW-ST – Spouse TW-ST| was no longer significantly related to Marital Well-Being (standardized β = .06; t(455) = 1.18; p = .24). In Step 4, results from the modified Sobel (1982) test revealed that the mediated effect was highly significant (z = -7.39; p < .0001). Thus, Financial Harmony fully mediated the relationship between husband/wife TW-ST differences and Marital Well-Being.⁴

Discussion. Study 1 offers initial support for both of our hypotheses. Although positive assortment is a near-universal finding in the attraction literature (Watson et al. 2004), the present survey of 458 married adults suggests that, at least when it comes to feelings toward spending, opposites attract. Consistent with the reasoning of Klohnen and Mendelsohn (1998), we find that the extent to which people are attracted to mates with opposing emotional reactions toward spending is significantly correlated with the extent to which they are dissatisfied with their own emotional reactions toward spending. However, this complementary attraction ultimately appears to be bad for marriages: the degree to which spouses differ in their emotional reactions toward spending is negatively associated with marital well-being, and this relationship is fully mediated by conflicts over money.

Of course, Study 1 is not without limitations. One limitation is that the analyses relied exclusively on one spouse's view of the marriage. People in long-term romantic relationships often have difficulty predicting their partner's attitudes toward products (Davis, Hoch, and Ragsdale 1986; Lerouge and Warlop 2006), and it is unclear whether their partner's emotional reactions toward spending are any more accessible. Another concern is the possibility that the results were an artifact of the sequence in which questions were asked (cf. Schwarz 1999): given that respondents answered questions about their marital conflicts over money before assessing their spouse's location on the TW-ST dimension, it is possible that salient thoughts of financial disharmony produced the (mis)perception that their spouse must have opposing emotional reactions toward spending. Our next study addresses both concerns.

Study 2

The primary purpose of Study 2 was to replicate our key results from Study 1 (complementary attraction and the negative relationship between husband/wife TW-ST differences and financial harmony and marital well-being) without relying on individuals' assessments of their spouse's emotional reactions toward spending. A secondary purpose was to examine whether the complementary attraction result would replicate if we did not first prime married people to think about the financial disagreements in their marriage.

Participants. In late 2007, the American RadioWorks website posted a survey about spending and saving. There was no indication that the survey concerned marriage until marriage-related questions appeared at the end of the survey. The survey concluded by encouraging married participants to ask their spouse to complete the survey as well. Thus, spouses within a couple completed the same survey at different times; both provided their own and their spouse's initials and zip code so that their responses could later be matched. Respondents were not paid to participate; their only incentive was learning their TW-ST score once the study concluded.

A total of 1,666 adults responded, including 739 married people. Of the married respondents, 112 persuaded their spouse to participate, and 627 did not. The 112 couples consisted of 110 heterosexual couples and two homosexual couples. Because some of the wording in our measure of marital well-being (discussed later) was exclusively designed for heterosexual couples, our analyses will focus exclusively on the 110 heterosexual couples.

In those couples, the wife was the first to take the survey 54% of the time. The mean age was 41.9 among husbands and 40.4 among wives. Both husbands and wives reported a median personal annual income in the range of \$60,000 – \$70,000. Marital length ranged from less than one year to 48 years (M = 11.6).

18

Procedure. Participants initially completed the Tightwad-Spendthrift scale ($\alpha = .77$) and then provided some demographic information. Married participants then completed the full Marital-Adjustment Test (Locke and Wallace 1959; $\alpha = .86$), a 15-item measure of marital well-being that assesses the extent to which partners are satisfied with the marriage, agree on important issues, and share interests. Married participants then provided their initials and zip code so that their responses could be matched with their spouse's responses.

Results. We began by examining whether our complementary attraction finding from Study 1 replicated. The correlation between husbands' TW-ST scores (as assessed by the husbands themselves) and wives' TW-ST scores (as assessed by the wives themselves) was negative and significant (r(108) = -.20; p < .05). Given that spouses assessed their own emotional reactions toward spending, the significant negative correlation observed here suggests that the complementary attraction result in Study 1 was not merely an artifact of relying on one spouse's view of the relationship. Moreover, note that here, unlike Study 1, spouses were not asked to assess the financial conflicts in their marriage before completing the Tightwad-Spendthrift scale. Thus, the negative correlation in Study 2 also suggests that the Study 1 finding was not an artifact of the sequence in which questions were asked.

Next, we examined the relationship between husband/wife Tightwad-Spendthrift differences, financial harmony, and marital well-being. We focus this analysis on the 97 couples in which both husbands and wives answered all Marital-Adjustment Test items. To operationalize spendthrift/tightwad differences within the marriage, we computed the absolute difference between husbands' TW-ST scores and wives' TW-ST scores. To operationalize financial harmony, we draw on one item from the Marital-Adjustment Test, in which participants indicate the extent to which they and their spouse agree or disagree when it comes to "handling family finances" on a 0 (always disagree) to 5 (always agree) scale. Responses from husbands and wives correlated significantly with one another (r(95) = .45; p < .0001) and thus were averaged to form our measure of Financial Harmony. To operationalize marital well-being, we used the sum of the remaining 14 Marital-Adjustment Test items ($\alpha = .85$). Sums from husbands and wives correlated significantly with one another (r(95) = .56; p < .0001) and thus were averaged to form our measure of Marital Well-Being.

Results from the mediation analysis are depicted in Figure 2. In Step 1, we regressed Marital Well-Being on |Husband TW-ST – Wife TW-ST|, which revealed that |Husband TW-ST – Wife TW-ST| significantly predicted Marital Well-Being (standardized β = -.20; *t*(95) = -1.98; *p* = .05). In Step 2, we regressed Financial Harmony on |Husband TW-ST – Wife TW-ST|, which revealed that |Husband TW-ST – Wife TW-ST| significantly predicted Financial Harmony (standardized β = -.27; *t*(95) = -2.72; *p* < .01). In Step 3, we regressed Marital Well-Being on Financial Harmony and |Husband TW-ST – Wife TW-ST|. Financial Harmony was significantly associated with Marital Well-Being (standardized β = .58; *t*(94) = 6.72; *p* < .001), but |Husband TW-ST – Wife TW-ST| was no longer significantly related to Marital Well-Being (standardized β = -.04; *t*(94) = -0.50; *p* = .62). In Step 4, results from the modified Sobel (1982) test revealed that the mediated effect was significant (*z* = -2.56; *p* = .01). Thus, Financial Harmony fully mediated the relationship between husband/wife TW-ST differences and Marital Well-Being.⁵

Discussion. Study 2 offers additional support for both of our hypotheses. When both spouses assessed their own emotional reactions toward spending, before being asked to consider the financial conflicts in their marriage, we observe evidence of complementary attraction. However, this complementary attraction ultimately appears to hurt marriages, as it is associated with greater conflicts over money and diminished marital well-being.

One concern with Study 2 is the possibility that spouses who are especially troubled by the financial conflicts in their marriage are most likely to persuade their spouses to participate, in an attempt to shed some scientific light on the problems in their marriage. This tendency could overstate the extent to which opposites attract, the extent to which complementary attraction hurts marriages, or both. Although we cannot compare the characteristics of married respondents who persuaded their spouse to participate to the characteristics of married non-respondents, we can assess the extent to which married respondents who persuaded their spouse to participate differ from married respondents who did not persuade their spouse to participate. There was no difference in responses to the single financial harmony item between married respondents who did not persuade their spouse to participate and married respondents who did persuade their spouse to participate (3.46 vs. 3.46; t(732) = .07; p = .95). In fact, married respondents who did not persuade their spouse to participate reported significantly lower marital well-being than married respondents who did persuade their spouse to participate (106.36 vs. 115.81; t(687) =3.42; p < .001). Thus, at least among the married people who took our survey, there is no evidence to suggest that the respondents who persuaded their spouse to participate were particularly troubled by their financial situation or had particularly unhappy marriages.

Study 3

Consistent with the reasoning of Klohnen and Mendelsohn (1998), the evidence presented thus far suggests that tightwads and spendthrifts are especially dissatisfied with their typical emotional reactions toward spending and thus tend to be attracted to one another. The process by which dissatisfaction with one's emotional reactions toward spending stimulates complementary attraction still remains unclear, however. Is complementary attraction the result of an inaccurate theory about what traits in a mate lead to happiness and thus a deliberate search for mates who do not possess disliked aspects of the self? Or do people correctly anticipate that a similar mate on this dimension would be ideal, but have an unanticipated positive affective response to opposite mates when they are encountered? That is, for disliked aspects of the self, do people look for their opposite, or do they just happen to find opposites most attractive when they encounter them?

In the consumption domain, one possibility is that tightwads and spendthrifts actively seek their opposites, perhaps as a conscious attempt to find someone who can help them overcome their normal emotional reactions toward spending. Alternatively, people may simply find potential mates with opposing emotional reactions toward spending most appealing when they encounter them. We examined whether people actively seek their opposite by asking unmarried people to indicate their ideal romantic partner's emotional reactions toward spending.

Participants. We utilized two samples for this study. The first sample consisted of 199 unmarried undergraduates (65% female; 39% in a romantic relationship, 61% not in a relationship) at a private northeastern university. The second sample consisted of unmarried readers of the *New York Times*. In the spring of 2007, the *TierneyLab* web log on *The New York Times* website posted a survey about spending and saving (this was a different survey from the one described in Study 1). Respondents gave their email address if they were willing to be contacted about future surveys, and in early 2009, 1,080 respondents were emailed and asked to take a new spending survey. Only 991 respondents actually received the email, as 89 of the email addresses given in 2007 were no longer valid. The original 2007 survey did not concern relationships, and there was no indication that the new survey concerned relationships until relationship-related questions appeared at the end of the survey. Thus, it is doubtful that the survey was particularly attractive to people who perceived spending to be a problem in their relationships and wanted to learn more about it. Respondents were not paid to participate; their only incentive was receiving a report of the study's results once it had concluded. A total of 427 people responded, but our analyses will focus on the 190 unmarried respondents (66% female; age range: 19-75, M = 37.1; 27% cohabiting, 24% dating, and 49% not in a relationship).⁶

Procedure. In the undergraduate sample, participants first completed the Tightwad-Spendthrift scale (α = .85) and then, after 10 minutes of unrelated surveys, were asked to indicate where there ideal romantic partner would be located on five dimensions. The key dimension was emotional reactions toward spending money (1-7 scale, where 1 = *hates to spend money* and 7 = *loves to spend money*). This appeared third on the list of dimensions, after introversion (1 = *extroverted* and 7 = *introverted*) and emotionality (1 = *not at all emotional* and 7 = *very emotional*), and before political liberalism (1 = *politically conservative* and 7 = *politically liberal*) and desire for risk (1 = *risk-averse* and 7 = *risk-seeking*). Participants were first asked to indicate where their ideal "short-term" romantic partner would be located on each dimension, and were then asked to indicate where their ideal "long-term" romantic partner would be located. Short-term romantic partners were described as "someone that you might date for a few weeks or months but do not intend to move in with and/or marry."

In the *New York Times* sample, participants first completed the Tightwad-Spendthrift scale ($\alpha = .84$) and then answered some unrelated questions and provided demographic information. Unmarried respondents then rated where their ideal short-term and long-term romantic partners would be located on the five dimensions discussed above.

Results and Discussion. Table 1 displays the correlations between TW-ST scores and ideal romantic partners' location on each dimension. In both samples, TW-ST scores were

positively and significantly correlated with ideal short-term and long-term romantic partners' location on the emotional reactions toward spending dimension (*r*s ranging from .25 to .39; all *p*s < .001). Neither gender nor relationship status significantly moderated the correlations between TW-ST scores and ideal romantic partners' emotional reactions toward spending (all *p*s > .13 in both samples). Correlations between TW-ST scores and ideal romantic partners' location on the non-spending dimensions were generally small (average non-spending *r* in New York Times sample = -.02; in undergraduate sample = -.03), with only one of the eight non-spending correlations reaching significance in each sample.

The results suggest that the more unmarried people dislike spending money, the more they think their ideal romantic partner should also dislike spending money, and vice versa. (The financial conflict and marital well-being results of Studies 1 and 2 suggest that this intuition is correct.) It thus appears unlikely that opposites attract because people actively seek their opposite. If anything, the present results suggest that opposites attract despite people's tendency to seek mates who have similar emotional reactions toward spending.

On the surface, this finding may appear to contradict the hypothesis that opposites attract. However, the present results are easily reconciled with the complementary attraction findings of Studies 1 and 2 when one considers that people tend to have poor introspective awareness of what they will initially find attractive when actually encountering potential mates (Eastwick and Finkel 2008; Kurzban and Weeden 2007; Todd et al. 2007; cf. Nisbett and Wilson 1977). This research documents a consistent disconnect between what people say they look for in an ideal mate and the characteristics of actual mates to whom they are attracted. Consistent with this pattern, people appear to accurately forecast what types of mates will make them happiest in the long run, but these forecasts fail to predict what types of mates people actually select.

GENERAL DISCUSSION

Consumer behavior researchers are understandably devoting more and more attention to the role of money in interpersonal behavior. For example, researchers have recently examined how the desire to form relationships influences spending decisions (Griskevicius et al. 2007), how spending money on others (vs. oneself) influences happiness (Dunn, Aknin, and Norton 2008), how monetary compensation (vs. non-monetary compensation) influences people's willingness to help others (Heyman and Ariely 2004), how money protects people from the pain of being socially excluded (Zhou, Vohs, and Baumeister 2009), how money reduces people's ability to take others' perspective (Caruso, Mead, and Vohs 2008), and how money leads people to physically distance themselves from others (Vohs, Mead, and Goode 2006, 2008). We build on the recent surge of interest in money and interpersonal behavior by examining the influence of emotional reactions toward spending on whom people marry and the extent to which those marriages are satisfying.

We found that people tend to marry spouses with opposing emotional reactions toward spending. Consistent with the reasoning of Klohnen and Mendelsohn (1998), we found that the more people were dissatisfied with their own emotional reactions toward spending, the more likely they were to be attracted to a mate with opposing emotional reactions toward spending. This complementary attraction pattern held not only when one spouse assessed both their own and their partner's emotional reactions toward spending, but also when each spouse in a marriage assessed only their own emotional reactions toward spending. This pattern is striking given that complementarity is rarely observed in married couples (Watson et al. 2004).

Study 3 suggests that this complementary attraction is not the result of a deliberate search for dissimilar mates. Unmarried people tend to think they would be happiest with mates with

similar emotional reactions toward spending. Thus, if anything, the observed complementary attraction occurs in spite of people's tendency to seek mates with similar emotional reactions toward spending. As in many other domains (e.g., women who say they prefer nice guys as long-term partners, but actually desire bad boys for short-term encounters, Urbaniak and Kilmann 2003, p. 421), people's accurate forecasts of what will make them happy in the long-run fail to predict what they will initially find attractive when actually encountering potential mates.

This disconnect between what people say they look for in an ideal mate and the characteristics of actual mates to whom they are attracted is unfortunate given the findings of Studies 1 and 2. Husband/wife differences in emotional reactions toward spending are associated with greater financial conflict in the marriage, which is in turn associated with diminished marital well-being.

Limitations and Future Directions

Although the complementary attraction finding supports our first hypothesis, it may also reflect the paper's key limitation. Because mates are not randomly assigned to one another, we cannot be completely confident that opposing emotional reactions toward spending will necessarily stimulate conflict over money and thus diminish marital well-being. It could be that people who select mates dissimilar to themselves are more prone to be unhappy in marriage than are people who select mates similar to themselves. Although complementarity on other dimensions has been associated with enhanced marital well-being (e.g., regulatory focus; Lake et al. 2008), we cannot rule out the possibility that people who select mates with opposing emotional reactions toward spending are naturally more prone to be unhappy in marriage. Random assignment of mates to one another would be required to definitively rule out this

alternative account. Of course, the nature of romantic relationships prohibits us from conducting such a study.

Our results suggest that people are attracted to complementary mates (Studies 1 and 2) despite having the intuition that their ideal mate would possess similar emotional reactions toward spending (Study 3). This disconnect raises the possibility that people experience a positive affective response to potential mates with opposing emotional reactions toward spending that is strong enough to swamp the influence of cognitive evaluations or lay theories favoring mates with similar emotional reactions toward spending. The way in which cognition and affect interact to influence interpersonal attraction is a potentially fruitful area for future research for decision researchers. Only a scarce amount of research in social psychology has addressed this topic. One notable exception is work by Montoya and Horton (2004), which found, consistent with Study 3, that similar mates are appealing primarily on a cognitive level. An experiment that presented subjects with biographical sketches of potential mates, including information diagnostic of their tightwaddism or spendthriftiness, and varied whether subjects are asked questions that tap either cognition (e.g., Do you think you share similar interests with this person?) or affect (e.g., How much fun would it be to date this person?) could shed further light on whether attraction to people with opposing emotional reactions toward spending is primarily driven by cognition or affect.

Future research should also examine whether there is evidence of complementary attraction in unmarried relationships. Given that tightwad/spendthrift differences tend to have negative effects on relationship quality, surveys of married people likely understate the degree to which tightwads and spendthrifts attract (i.e., if tightwad/spendthrift differences are contributing to the dissolution of relationships before they can reach marriage). Examining people who have only been dating for a short period of time would provide a cleaner assessment of the extent to which tightwads and spendthrifts instantly attract.

Several open questions regarding the relationship between complementary attraction, financial conflict, and marital well-being are also worthy of future research. For example, it is worth examining whether complementary attraction influences other measures of marital quality, such as domestic violence or divorce. It would also be useful to examine whether the way in which couples handle their finances (e.g., the use of joint vs. separate bank accounts; the extent to which savings and investment decisions are shared by spouses vs. controlled by one spouse) moderates the influence of complementary attraction on financial conflict and marital well-being.

Conclusion

Unmarried people believe they would be happiest with mates with similar emotional reactions toward spending. They appear to be correct. Unfortunately, consistent with the logic of Klohnen and Mendelsohn (1998), people tend to be attracted to mates with opposing emotional reactions toward spending. The marriages that result appear to make tightwads and spendthrifts about as happy as the Hoarders and Wasters in Dante's *Inferno*.

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FOOTNOTES

¹ Similar results were obtained among unmarried respondents: Unconflicted consumers had significantly lower conflicted about spending index scores than both tightwads (3.51 vs. 3.90; t(357) = 2.55; p = .01) and spendthrifts (3.51 vs. 4.10; t(310) = 3.11; p < .01). Conflicted about spending index scores did not differ significantly between tightwads and spendthrifts (p = .37). ² Although we argue that our "difference in opposite direction" scores are theoretically more appropriate for this analysis than absolute difference scores, empirically the two scores are highly correlated (r(419) = .76; p < .0001), indicating that most differences between the TW-ST scores of spouses in our sample are differences in the opposite direction. ³ Indeed, married participants whose TW-ST scores did not differ from their spouse's TW-ST score in the opposite direction (difference in opposite direction scores ≤ 0) reported significantly greater Financial Harmony than married participants whose TW-ST scores did differ from their spouse's TW-ST score in the opposite direction (difference in opposite direction scores > 0) (29.45 vs. 26.62; t(419) = 2.79; p < .01). This suggests that differences in the opposite direction are more likely to lead to conflict over money than are differences in the same direction. ⁴ One limitation of using |Self TW-ST – Spouse TW-ST| as the independent variable is that absolute difference scores are confounded with their components when those components have unequal variances (Griffin et al. 1999). That was the case here: there was significantly less variance in Self TW-ST than in Spouse TW-ST (14.28 vs. 20.77; F(1,456) = 15.7; p < .001). Thus, following the recommendation of Kenny (1988), we ran a second mediation analysis in which each regression controlled for component scores (Self TW-ST and Spouse TW-ST). The Sobel test remained significant (z = -7.32; p < .001) when components are controlled for. ⁵ Although the variance in husbands' TW-ST scores did not differ from the variance in wives' TW-ST scores (F(1.95) = .04; p = .85), we still followed the recommendation of Kenny (1988) and ran a second mediation analysis in which each regression controlled for component scores. The Sobel test remained significant (z = -2.29; p < .025) when components are controlled for. ⁶ Instead of rating their ideal partner, married respondents were asked to complete the TW-ST scale for their spouse ($\alpha = .80$). Consistent with the results of Studies 1 and 2, the correlation

between Self TW-ST and Spouse TW-ST was negative and significant (r(184) = -.16; p < .05).

TABLE 1

CORRELATIONS BETWEEN TW-ST SCALE SCORES OF UNMARRIED RESPONDENTS AND WHERE THEIR IDEAL ROMANTIC PARTNER IS LOCATED ON FIVE DIMENSIONS (STUDY 3)

	NYT Readers (n = 190)		Undergraduates (n = 199)		All Respondents (n = 389)	
	Short-Term	Long-Term	Short-Term	Long-Term	Short-Term	Long-Term
Introverted	10	17*	06	16*	07	16**
Emotional	01	.10	.02	01	.01	.03
Loves to Spend Money	.39***	.25***	.34***	.35***	.36***	.30***
Politically Liberal	08	01	05	06	06	03
Risk-Seeking	.08	.07	.02	.08	.05	.07

 $p \le .05; **p \le .01; ***p \le .001$

FIGURE 1

MEDIATION ANALYSIS (STUDY 1)



The values in the figure represent standardized regression coefficients. The coefficient in parentheses represents the association between |Self TW-ST – Spouse TW-ST| and Marital Well-Being when Financial Harmony is not included in the model.

FIGURE 2

MEDIATION ANALYSIS (STUDY 2)



The values in the figure represent standardized regression coefficients. The coefficient in parentheses represents the association between |Husband TW-ST – Wife TW-ST| and Marital Well-Being when Financial Harmony is not included in the model.