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The marketing of debt consolidation loans is intended to offer a financial remedy to consumers faced with mounting debt and credit problems and unable to meet their monthly payments. The authors argue that debt consolidation loan marketing overemphasizes the short-term benefits (e.g., lower monthly payments) and downplays the considerable downside of these loans (e.g., longer repayment and more total interest paid). Two experiments demonstrate that a financial literacy intervention combining information about loans *and* lenders can help consumers understand and respond to debt consolidation loan marketing (whereas a basic financial numeracy intervention does not). Implications for consumers, marketers, public policy makers, and researchers who work in the area of financial literacy are discussed.

Keywords: loan marketing, financial literacy, money management

Using Loan Plus Lender Literacy Information to Combat One-Sided Marketing of Debt Consolidation Loans

Although the availability of consumer credit has many advantages for consumers and the economy, the downside for consumers has become increasingly evident. Consumers carry high-interest credit card balances, debt repayment consumes an increasing proportion of income, savings rates decline, and mortgage defaults and bankruptcy rates soar. For example, personal bankruptcy rates were up almost 30% in 2008, and 14.7% of U.S. families had debt exceeding 40% of their income in 2007 (before the recession) (U.S. Congress Joint Economic Committee 2009). In 2007, the average (median) balance for those carrying a balance rose 30.4% (25%) to $7,300 ($3,000); in the preceding three years, the average (median) rose 16.7% (9.1%) (Federal Reserve Board 2009). As these financial risks have risen, the market has responded by offering "remedies" or solutions to consumers' financial problems.

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Remedies refer to products or services designed to reduce risk or offer solutions to problems in a variety of substantive domains, such as health and security (e.g., smoking cessation aids, identity theft protection) (Bolton, Cohen, and Bloom 2006). In the financial domain, remedies include various offerings designed to help consumers reduce financial risks by paying down debt—such as credit counseling, home equity loans, payday loans, debt consolidation, debt settlement, and other "solutions." Perhaps ironically, prior research has shown that a striking number of these financial remedies involve loans—taking out debt to solve problems associated with overspending and too much debt. For example, home equity loans and lines of credit, as well as mortgage advertising, are often promoted for debt consolidation and credit problems (Perry and Motley 2009; Williams 1999).

DEBT CONSOLIDATION LOAN MARKETING

The marketing of debt consolidation loans is intended to offer a financial solution to consumers faced with mounting debt and credit problems and worried about meeting their monthly payments. Typically, such loan offers promise to consolidate various consumer debts into a single loan, over a longer period, and perhaps with a lower interest rate, thus delivering a lower monthly payment. Although consolidating various loans at higher interest rates into a single loan at a lower interest rate lowers monthly payments and may alleviate immediate burdens for financially squeezed consumers, there is a significant downside.

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The Downside of Debt Consolidation

An important downside of debt consolidation is the tradeoff between the short-term relief of lower monthly payments and the long-term financial burdens, especially much higher total interest paid. Although consumer financial literacy is certainly part of the problem, our initial qualitative analysis of loan advertising found few advertisements that mentioned higher interest or longer loan terms (Bloom, Bolton, and Cohen 2010). Instead, the majority ignored the downside and emphasized lower monthly payments and made "hassle-free" claims. These arguably one-sided claims may appeal to consumers faced with looming debt problems whose state of mind may induce them to downplay the negative aspects of debt consolidation. In addition, many debt-burdened consumers can only obtain consolidation loans with relatively high interest rates rather than the strongly promoted lower rates. Simply put, these loans over time may mean much more debt, not less.

Another downside of debt consolidation occurs if the financial remedy—by promising to manage or reduce risk—undermines financially protective behavior. That is, why avoid risk if a remedy exists to take care of the problem? The net effect is a form of moral hazard or risk compensation (e.g., Calkins and Zlatoper 2001; Richens, Imrie, and Copas 2000; Rodgers 1996; Rogers and Greenfield 1999), in which consumers trade away some of the safety gains of the remedy by continuing to engage in risky behavior and even increase their exposure to risk. For example, rather than minimizing use of credit cards, debt consolidation loan marketing might lead consumers to increase spending limits on their cards or even acquire additional cards. Our research confirms this downside. In a sample of college students, exposure to a debt consolidation loan message lowered financial risk perceptions and increased risky financial behavioral intentions, especially among those most at risk (Bolton, Cohen, and Bloom 2006). A similar pattern also occurred among adult consumers exposed to real and fictitious advertisements making debt reduction or no-hassle claims (Bloom, Bolton, and Cohen 2010). Thus, this downside of debt consolidation loan marketing seems robust and widespread.

Whether the advantages of debt consolidation loans outweigh their disadvantages is likely to vary across consumers and situations. Some empirical evidence suggests that these loans may leave consumers no better off (Moorman and Garasky 2008; Williams 1999). Furthermore, these and other loan products and services promising various forms of "debt relief" are receiving increasing regulatory scrutiny (Federal Trade Commission 2009; Goodman 2010).

Debt Consolidation Loans and Financial Literacy

This research develops an information-based intervention to help consumers better understand debt consolidation loans, especially their downside. Not surprisingly, consolidation loan marketers tend to overpromote the benefits and underplay the disadvantages; therefore, our efforts focus on providing a more balanced view of these loans. Our intervention approach focuses on two dimensions—loan-focused and lender-focused.

Loan-focused literacy. A loan-focused approach attempts to improve financial literacy by increasing consumer knowledge about loans—how and why loans work and their advantages and disadvantages. Prior research on financial literacy has tended to focus on the quantitative aspects of financial literacy, which we refer to as financial numeracy, such as the ability to correctly answer questions about compound interest and inflation. For example, research suggests that U.S. consumers exhibit low levels of financial numeracy skills and that higher skills are associated with improved financial decisions, including saving, retirement planning, and borrowing (Bernheim 1995; Lusardi and Mitchell 2009; Lusardi, Mitchell, and Curto 2010; Moore 2003). This arithmetic form of financial literacy is broadly applicable across consumer personal financial decisions, in contrast with some recent efforts to develop more advanced or domain-specific measures of investment literacy (Lusardi and Mitchell 2009) and debt literacy (Lusardi and Tufano 2009). For example, debt literacy (measured by consumer ability to correctly answer questions about compound interest, paying off credit card debt with minimum payments, and the time value of money) was strikingly low as well as associated with self-reported overindebtedness. However, research on financial literacy tends to rely on correlational relationships, and causal evidence (e.g., for the effectiveness of financial literacy programs) is lacking and/or mixed (Braunstein and Welch 2002). For debt consolidation loans, the relationships among annual percentage rate (APR), loan lengths, monthly payments, and total interest paid are of particular interest and constitute what we refer to as domain-specific literacy or "loan literacy."

Lender-focused literacy. Lender-focused literacy refers to consumer knowledge about lenders, including how and why particular lenders act as they do. The emphasis on the why is deliberate because it represents a previously untapped dimension of financial literacy. For example, consumers may categorize lenders as financial institutions (which may follow different rules) rather than marketers attempting to persuade them to make a particular loan purchase. The Fannie Mae National Housing Survey (Fannie Mae 2002) indicates that 39% of consumers erroneously believe that lenders are obligated to give them the best rate for which they qualify—which, among other things, might lead consumers to search less than they should to obtain the best loan terms. Moreover, if consumers fail to categorize lenders as marketers, they are less apt to bring to mind or make appropriate adjustments for more generalized understanding of persuasion tactics. Friestad and Wright (1994) refer to persuasion knowledge as a schemer schema and propose that consumers can use such knowledge to cope with persuasion attempts. More recently, Wright (2002) argues that consumers have social intelligence about the marketplace (i.e., marketplace metacognition) that they can use to interpret marketing tactics. Most prior research has tended to (1) examine general persuasion knowledge rather than tactics specific to a class of products or services as we do in this research and (2) rely on measures of preexisting knowledge rather than manipulations of it, thus failing to isolate this type of knowledge from other knowledge as well as related consumer characteristics (Brown and Krishna 2004; Campbell and Kirmani 2000; Friestad and Wright 1994; Williams, Fitzsimons, and

Block 2004). Given that lender literacy is likely to be low, our lender-focused intervention is designed to improve consumer knowledge about lender motives and behaviors while activating marketplace metacognition.

EMPIRICAL OVERVIEW

Our basic premise is that both loan-focused and lender-focused dimensions are needed to improve consumer understanding of and response to debt consolidation loan marketing. Loan literacy, by providing information about how and why loans work, should help consumers evaluate loan appeals and assess the degree to which consolidation loans will reduce debt. Likewise, lender literacy, by providing information about lenders, should help consumers correct mistaken beliefs about lenders and better assess their claims. Indeed, we believe that both interventions are necessary. That is, lender literacy might increase skepticism about lenders and their claims, but consumers will also require loan literacy to know how to improve their evaluation of the loans themselves. (Viewed another way, loan literacy might provide information helpful to evaluating the loans, but lender literacy will prompt a more careful evaluation of loan claims made by lenders.) Thus, we hypothesize that loan- and lender-focused approaches will be most effective when combined.

We present two experiments to test the effectiveness of loan- and lender-focused literacy on consumer response to debt consolidation loan marketing. When testing effectiveness, we argue that a successful intervention should (1) increase intentions to engage in financially protective behaviors, such as prudent money management (because one downside of debt consolidation loan marketing is its negative impact on such behaviors); (2) reduce the favorability of loan evaluations (which are likely overoptimistic given one-sided marketing of these loans); and (3) increase the perceived importance of interest in loan decisions (because total interest paid is virtually ignored in consolidation loan marketing). The latter two criteria represent consequences for consumers in the market for debt consolidation, whereas the first criterion represents broader consequences for consumers in general whether in the market for loans or not.

EXPERIMENT 1: LOAN-FOCUSED AND LENDER-FOCUSED LITERACY

In Experiment 1, we test the unique effects of loan-focused and lender-focused literacy dimensions following exposure to debt consolidation loan marketing. Because we were less concerned with assessing the impact of our eventual intervention than with understanding the separate effects of each dimension (using exposure to typical debt consolidation loan advertising by itself as a baseline), we used a relatively homogeneous convenience sample of college students. College students are also an important population in which to study the impact of loan marketing given rising levels of debt and potential susceptibility to loan marketing. (The average college graduate has nearly $20,000 in debt; average credit card debt has increased 47% between 1989 and 2004 for 25- to 34-year-olds and 11% for 18- to 24-year-olds; and nearly one in five 18- to 24-year-olds is in debt hardship, up from 12% in 1989 [Draut 2008].)

Method

Subjects and design. The experiment was a 2 (loan-focused intervention/not) $\times$ 2 (lender-focused intervention/not) between-subjects design. Participants were 127 undergraduate students who participated for extra credit in an introductory marketing course, screened to eliminate anyone with advanced finance coursework.

Materials and procedure. All participants were first exposed to two advertising messages for debt consolidation loans (a real and fictitious advertisement emphasizing the advantages of debt consolidation, including debt reduction and no-hassle claims) to familiarize them with such loans and provide a common baseline. In all conditions, participants also read basic financial numeracy information (titled "Loan Basics") intended to be neutral and factual in tone. This information included a description of APR and an explanation and example of how loan length affects monthly payments and total interest owed. Doing this enables us to test whether loan- and lender-focused dimensions of financial literacy have any added value beyond basic financial numeracy.

Participants were then randomly assigned to receive further information, either a loan-focused or a lender-focused intervention or both. Participants who received a loan-focused intervention message read information (titled "Learn the Truth About Loans") that indicated "When loan repayment is stretched over time, you end up paying more overall interest" and that explained various loan outcomes (e.g., not qualifying for lower interest rates and winding up in more debt). Participants who received a lender-focused intervention message then read information (titled "Learn the Truth About Lenders") that indicated "Lenders are really sellers who act in their best interest, not yours" and that explained various lender practices (e.g., hidden fees and penalties and deceptive practices). The conclusion drawn in each intervention message stated "Don't count on debt consolidation [loans/lenders] to come to your rescue! When it comes to debt, these [loans/lenders] aren't the solution." The interventions were also similar in layout and graphics. After exposure to the intervention, participants rated the information on two five-point scales (with endpoints "uninformative/informative" and "worthless/valuable").

Participants then reported their money management intentions on seven-point scales (with endpoints "definitely will not/definitely will") for the following items: "Pay off the entire balance on credit cards each month," "Keep three months' worth of living expenses as a cushion in savings," and "Budget and track monthly living expenses." Participants also indicated their evaluation of debt consolidation loans on two seven-point scales ("ineffective/effective" and "risky/safe") and rated the importance of interest and non-interest criteria when making loan decisions as follows: "Imagine for a moment that you decide to take out a debt consolidation loan. Please rate how important each of the following are to you." Participants then rated (on five-point scales with endpoints "unimportant/important") the following items: "convenience of a single monthly payment," "low monthly payments," "long repayment period," "low APR," "low total interest paid," and "easy application process."

Finally, participants responded to a ten-item quiz that measures loan and lender financial literacy as a confirmation of the intended effects of our interventions. The loan-focused section included five multiple-choice questions regarding loan terms and their effects on monthly payments and interest owed. For example, participants were asked to "imagine a debt of $1,000. How much will be owed after 5 years at an interest rate of 10% compounded annually" and to select among six interval responses. The lender-focused section included five true/false questions regarding lenders. For example, participants were asked whether "lenders are obligated to offer you the best loan terms possible given your credit record." We drew items from past financial literacy measures in the literature when possible.[1]

Results

We conducted analyses as a function of lender intervention, loan intervention, and their interaction. Descriptive means for key dependent variables appear in Table 1.

Manipulation checks. Ratings of the interventions indicate that participants' perceptions of their worth and value did not differ ($M = 4.05[.96]$; $F < 1$). As intended, participants' scores on the financial literacy quiz revealed a main effect of the loan intervention ($M_{loan} = 5.15[1.30]$ vs. $M_{no\text{-}loan} = 4.55[1.82]$; $F(1, 123) = 4.77$, $p < .05$); moreover, the lender intervention marginally increased the proportion of high-scoring participants on the lender-related items ($\chi^2 = 3.66$, $p = .06$). Stronger effects seem likely in a population lacking the education and sophistication of college students; however, both achieved their intended purposes.

Money management. As expected, analysis of variance (ANOVA) of money management intentions (coefficient $\alpha = .76$) revealed a two-way interaction of loan and lender interventions ($F(1, 123) = 4.81$, $p < .05$, partial $\omega^2 = .03$). In the presence of the lender intervention, follow-up simple effects indicate that the loan intervention increased money management intentions ($F(1, 123) = 4.13$, $p < .05$, Cohen's $d = .43$); in its absence, the loan intervention had no effect ($F(1, 123) = 1.07$, $p = .30$). These results indicate that the interventions work best in concert to enhance intentions to engage in financially protective responding.

Loan evaluations. The ANOVA of the loan ratings (coefficient $\alpha = .86$) revealed a main effect of the lender intervention ($F(1, 123) = 5.24$, $p < .05$), qualified by its interaction with the loan intervention ($F(1, 123) = 3.72$, $p = .05$, partial $\omega^2 = .02$). In the presence of the lender intervention, the loan intervention decreased loan evaluations ($F(1, 123) = 3.94$, $p < .05$, Cohen's $d = .49$); in its absence, the loan intervention had no effect ($F < 1$). That is, loan and lender interventions are both required to decrease favorable evaluations of debt consolidation.

Loan decisions. For the data regarding loan decision making, the ANOVA of the interest-related items (coefficient $\alpha = .76$) revealed a significant effect of the loan intervention ($F(1, 123) = 5.89$, $p < .05$), qualified by its interaction with the lender intervention ($F(1, 123) = 4.08$, $p < .05$, partial $\omega^2 = .02$). In the presence of the loan intervention, the lender intervention increased the perceived importance of interest rates ($F(1, 123) = 9.22$, $p < .01$, Cohen's $d = .57$); in the absence of the loan intervention, the lender intervention had no effect ($F < 1$). (A corresponding analysis of noninterest items is nonsignificant; $p > .22$.) Again, loan and lender interventions work best in concert to improve loan decision making, specifically by increasing the perceived importance of low interest.

In summary, a combined loan- and lender-focused intervention increased money management intentions, reduced loan evaluations (which were likely overoptimistic given the one-sided marketing of these loans), and improved loan decision making (by increasing the perceived importance of low interest). Thus, loan and lender literacy together have the potential to improve personal financial responding by consumers. Strikingly, single interventions had no effect, making it less likely that the mere increase in the amount of information explains the success of our combined intervention. Instead, we argue that loan-focused interventions provide consumers with the knowledge to evaluate loans more appropriately but that lender-focused interventions are also needed to help consumers respond to the marketing claims made by lenders.

EXPERIMENT 2: TESTING A COMBINED INTERVENTION

The primary goal of Experiment 2 is to test the efficacy of an intervention combining loan- and lender-focused dimensions in a field sample of adult consumers. As a secondary objective, we also compare the combined intervention with an intervention providing only basic financial numeracy information (i.e., explaining APR and compounding interest over time). From a policy perspective, the latter may be considered less intrusive and also consistent with the kinds of disclosure information already used for some other financial products (e.g., credit card disclosures). It thus serves as a theoretically and substantively relevant control group.

[1]In our sampling of loan literacy levels, 24% of college students answered the compound interest question described in the text correctly, 12% overestimated, and 64% underestimated. On the five-item loan literacy quiz, 55% answered less than half correctly. In a convenience sample of adults, 24% answered correctly, 25% overestimated, and 51% underestimated; on the five-item loan literacy quiz, 59% answered less than half correctly. Although comparisons are fraught, Lusardi and Tufano (2008) find that only 36% of adult consumers correctly answered their question about compound interest loans. Turning to lender literacy, the Fannie Mae National Housing Survey (Fannie Mae 2002) indicates that 39% of consumers (erroneously) believe that lenders are obligated to give them the best rate for which they qualify. In our own (convenience) sampling, 39% of college students and 27% of adults held this erroneous belief.

Table 1
LOAN- AND LENDER-FOCUSED DIMENSIONS OF FINANCIAL LITERACY (EXPERIMENT 1)

Financial Literacy Intervention	*N*	*Money Management Intentions*	*Loan Evaluation*	*Importance of Low Interest*
None (control group)	34	5.92 (.85)	2.97 (1.15)	4.15 (.69)
Loan-focused	34	5.62 (1.30)	3.19 (1.46)	4.21 (.75)
Lender-focused	31	5.55 (1.50)	2.89 (1.38)	3.84 (1.13)
Loan- and lender-focused	28	6.19 (1.11)	2.21 (1.18)	4.82 (.57)

Method

Subjects and design. The experiment was a three-group (no intervention, financial numeracy only, financial numeracy + combined intervention) between-subjects design. Participants were 132 adult consumers drawn from a commercial panel who owned at least one credit card and who had not previously purchased a debt consolidation loan. The sample skewed slightly toward women (55%), with desirable heterogeneity of age (median 45–54 years), income (median $40,000–49,999), and education (median four-year college).

Materials and procedure. All participants were first exposed to an advertising message we created for debt consolidation loans that embodied central characteristics of actual advertisements in emphasizing the advantages of debt consolidation, including debt reduction and no-hassle claims. Participants then provided their opinion of the debt consolidation program featured in the advertisement (on three seven-point scales with endpoints "a bad idea/a good idea," "ineffective/effective," and "risky/safe"), intended as a baseline measure of attitudes toward debt consolidation after ad exposure and before the intervention.

Participants were then exposed to one of three different intervention levels. Some participants were exposed to basic financial numeracy information, and some participants were exposed to this basic numeracy information and a combined intervention emphasizing loan- and lender-focused dimensions of financial literacy (as in Experiment 1). The remaining participants received no intervention and served as an ad-only control group for comparison purposes.

Participants then reported their money management intentions on seven-point scales (with endpoints "very unlikely/very likely") for the following items: "Pay off the entire balance on credit cards each month," "Keep three months' worth of living expenses as a cushion in savings," "Budget and track monthly living expenses," "Refinance to extend the term of outstanding loans" (reverse coded), "Take out a new loan when existing loans have not been paid off" (reverse coded), and "Spend money in advance of receiving it (e.g., buy-now-pay-later, pay-day borrowing" (reverse coded). Participants also indicated their evaluation of debt consolidation loans on four seven-point scales ("negative/positive," "a bad idea/a good idea," "ineffective/effective," and "risky/safe"). Participants also rated the importance of interest and noninterest criteria when making loan decisions (see Experiment 1 for wording). Finally, participants responded to various background questions, including education and income (used as covariates for control purposes).

Results

We conducted analyses as a function of the intervention, post-ad-exposure debt consolidation attitudes (coefficient $\alpha = .96$; standardized $M = 0$, $SD = 1$), and their interaction. Descriptive means for key dependent variables appear in Table 2.

Money management. The ANOVA of money management intentions (coefficient $\alpha = .77$) revealed a significant effect of intervention condition ($F(2, 122) = 3.54$, $p < .05$), a nonsignificant effect of post-ad attitudes ($F < 1$), and their expected two-way interaction ($F(2, 122) = 2.97$, $p = .05$, partial $\omega^2 = .03$).[2] For the no-intervention ad-only condition, the coefficient for the attitude covariate was negative and significant ($b = -.41[.17]$, $t = -2.44$, $p < .05$). That is, more favorable attitudes toward debt consolidation after exposure to a debt consolidation loan advertisement led to a decline in intentions to manage money carefully—consistent with the downside that such one-sided marketing undermines financially protective behaviors.

Table 2
TESTING A COMBINED INTERVENTION (EXPERIMENT 2)

Corrective Intervention	*N*	*Money Management Intentions*	*Loan Evaluation*	*Interest Importance (Relative)*
None (control group)	48	5.68 (1.09) b = −.41 (.17)	2.93 (1.87) b = 1.54 (.21)	.71 (.84) b = −.23 (.12)
Basic financial numeracy	42	5.40 (1.27) b = .18(.20)	3.30 (1.47) b = .74 (.24)	.64 (.71) b = −.18 (.14)
Loan- and lender-focused	42	6.13 (1.06) b = .02 (.16)	2.47 (1.92) b = .94 (.19)	.83 (.79) b = .13 (.11)

Notes: Means, standard deviations, and coefficients for the initial consolidation attitude covariate are shown for each condition.

We then conducted a spotlight analysis at more and less favorable post-ad-exposure debt consolidation attitudes (i.e., +1 SD and −1 SD) to understand the nature of the two-way interaction. For the contrast of the combined intervention versus no-intervention, the combined intervention had no effect on money management intentions when post-ad attitudes were already less favorable (i.e., −1 SD; 6.09 vs. 6.08, $t = .12$, $p = .91$) but, as intended, increased money management intentions when attitudes were more favorable (i.e., +1 SD; 6.12 vs. 5.22, $t = 2.69$, $p < .05$, Cohen's $d = .83$). However, by itself, the financial numeracy intervention actually lowered prudent money management intentions (compared with the no-intervention control group) when post-ad-exposure consolidation attitudes were less favorable (i.e., −1 SD; 5.28 vs. 6.05, $t = -2.22$, $p < .05$, Cohen's $d = .71$) and had no effect when consolidation attitudes were more favorable (+1 SD; 5.65 vs. 5.22, $t = 1.16$, $p = .25$). These results suggest that an intervention combining loan and lender literacy dimensions can successfully encourage money management intentions (which are undermined when debt consolidation loan attitudes are favorable), in marked contrast with a basic financial numeracy intervention (which seems to inadvertently exacerbate this downside among people whose attitudes are less favorable).

Loan evaluations. The ANOVA of postintervention loan evaluation ratings (coefficient $\alpha = .97$) revealed an effect of intervention condition ($F(2, 122) = 4.86$, $p < .05$), an effect of post-ad-exposure attitudes ($F(1, 122) = 73.38$, $p < .01$), and their expected two-way interaction ($F(2, 122) = 3.65$, $p < .05$, partial $\omega^2 = .02$). For the no-intervention condition, the coefficient for the attitude covariate was significant

[2]For completeness' sake, education and income effects were nonsignificant ($p > .15$) for all dependent variables with one exception: The highest levels of education (i.e., graduate-level vs. undergraduate or lower) increased money management intentions ($F(3, 122) = 2.58$, $p = .06$).

($b = 1.54[.21]$, $t = 7.45$, $p < .01$). That is, as post-ad attitudes toward debt consolidation increased, loan evaluations also increased.

We then conducted a spotlight analysis for more and less favorable post-ad-exposure debt consolidation attitudes (i.e., +1 SD and −1 SD) to understand the nature of the two-way interaction. For the contrast of the combined intervention versus no-intervention, the combined intervention had no effect on loan evaluations when post-ad attitudes were less favorable (i.e., −1 SD; 1.25 vs. 1.42, $t = -.41$, $p = .68$) and, importantly, reduced loan evaluations when attitudes were more favorable (i.e., +1 SD; 3.13 vs. 4.49, $t = -3.33$, $p < .01$, Cohen's $d = .73$). Conversely, relative to the no-intervention ad-only control group, the financial numeracy intervention increased loan evaluations when post-ad attitudes were less favorable (i.e., −1 SD; 2.31 vs. 1.42, $t = -2.12$, $p < .05$, Cohen's $d = .48$) and had no effect when attitudes were more favorable (i.e., +1 SD; 3.80 vs. 4.49, $t = -1.56$, $p = .12$). This undesirable effect of basic financial numeracy information is similar to that observed for money management intentions. These results indicate that an intervention combining loan and lender literacy dimensions successfully targeted and reduced favorable attitudes toward debt consolidation after exposure to debt consolidation loan advertising, while the basic financial numeracy intervention did not and sometimes increased debt consolidation attitudes.

Loan decisions. The ANOVA of the index reflecting the perceived importance of interest versus noninterest items (coefficient $\alpha = .80$ and .76, respectively) in making loan decisions revealed an interaction between intervention condition and post-ad attitudes ($F(2, 122) = 3.04$, $p = .05$, partial $\omega^2 = .03$); intervention condition and post-ad attitudes were nonsignificant (respectively, $F < 1$; $F(1, 122) = 1.63$, $p = .20$). For the no-intervention ad-only condition, the coefficient for the post-ad-attitude covariate was negative ($b = -.23[.12]$, $t = -1.91$, $p = .06$). That is, as attitudes toward debt consolidation increased following ad exposure, the relative importance of interest as a decision criterion declined. This result is consistent with the one-sided nature of such advertising, which emphasizes the advantages of debt consolidation loans (e.g., lower monthly payments and no-hassle claims) while underplaying the importance of lower interest.

We then conducted a spotlight analysis at more and less favorable post-ad-exposure debt consolidation attitudes (i.e., +1 SD and −1 SD) to understand the nature of the two-way interaction. Again, the combined intervention (versus no-intervention) had no effect on interest importance when post-ad attitudes were less favorable (i.e., −1 SD; .81 vs. 1.04, $t = -1.03$, $p = .31$) but, as intended, increased the relative importance of interest when attitudes were more favorable (i.e., +1 SD; 1.07 vs. .59, $t = 2.08$, $p < .05$, Cohen's $d = .57$). The financial numeracy intervention had no effect on interest importance when post-ad-exposure consolidation attitudes were less favorable (i.e., −1 SD; .97 vs. 1.04, $t = -.28$, $p = .78$) or more favorable (i.e., +1 SD; .61 vs. .59, $t = .07$, $p = .94$). Thus, the intervention combining loan and lender literacy dimensions successfully improved loan decision making by increasing the perceived importance of interest; the basic financial numeracy intervention did not.

In summary, more favorable debt consolidation attitudes following ad exposure are associated with less prudent money management intentions and the reduced importance of interest—consistent with the undesirable effects of debt consolidation loan marketing. An intervention providing basic financial numeracy information had no desirable effects and may even backfire by creating more favorable loan attitudes. It would seem that something more than financial numeracy information is needed to help consumers respond to fairly one-sided debt consolidation loan marketing, perhaps because such information is perceived as relatively neutral, more challenging, and less immediately relevant. In contrast, an intervention comprising loan- and lender-focused information was successful. The combined intervention undermined favorable loan evaluations and improved financially protective behaviors and loan-related decision making (through the perceived importance of low interest).

GENERAL DISCUSSION

The main contributions of this research are twofold. First, we provide evidence that debt consolidation loan marketing can have potentially harmful consequences on consumers' personal finances. Specifically, favorable debt consolidation loan attitudes undermine financially protective behaviors (e.g., prudent money management) and worsen loan decisions (e.g., by reducing the perceived importance of low interest when choosing a loan). We show that a well-constructed financial literacy intervention improves these responses and helps correct unreasonably favorable debt consolidation loan attitudes that are based on one-sided information. Second, we expand the literature on financial literacy by (1) decomposing literacy into two dimensions, loan- and lender-focused (the latter almost ignored until now), and (2) manipulating these dimensions rather than relying on measurement to demonstrate their combined efficacy. As expected, a combined intervention helps consumers respond to debt consolidation marketing—by overcoming more favorable loan attitudes, encouraging money management intentions, and improving loan decisions by increasing the perceived importance of interest.

Financial Products and Financial Literacy

Low levels of financial literacy are a matter of increasing global concern (Organisation for Economic Co-operation and Development 2008). Although most measures of financial literacy typically focus on basic concepts (e.g., understanding inflation and compound interest), consumers need to make complex decisions regarding cash flow management, credit, savings and retirement, and home ownership. Meanwhile, there has been an explosion of financial products, and these products have grown increasingly complex, with the risk and responsibility for decisions about them being shifted toward consumers (e.g., choice in retirement savings) (Organisation for Economic Co-operation and Development 2008). Lack of financial literacy has been linked to problems with debt and lower levels of retirement planning and saving (Lusardi and Mitchell 2007; Lusardi and Tufano 2009; Van Rooij, Lusardi, and Alessie 2007). Some of these problems reflect basic numeracy difficulties, such as poor understanding of interest rates (Lee and Hogarth 1999) and a general tendency to underestimate exponential growth and thereby undersave and overborrow (Eisenstein and Hoch 2005; Stango and Zinman 2008). Although we agree that such numeracy difficulties are problematic, our research suggests that basic financial numeracy is insufficient to help consumers understand and respond to more specific financial products, including debt consolidation loans.

Moreover, financial problems may also arise from "lay theories" of personal finance (see Molden and Dweck 2006), including widespread and harmful "consumer finance myths" (Emmons 2004). These lay theories may be especially harmful when the downside of financial remedies are not understood. For example, the myth that "all that matters is your monthly payment" leads people to favor lower interest from longer duration loans, thus pushing payment burdens into the future. In the case of borrowing, the monthly payment myth coincides with the belief that resources will be less constrained in the future (Zauberman and Lynch 2005). Similarly, the myth that lenders are obligated to offer the lowest rate for which consumers qualify may reduce consumer search and lead consumers to accept suboptimal loan terms. As our work attests, a financial literacy intervention that targets such myths, specifically erroneous lay beliefs about loans and lenders, can improve financial decision making. These myths or lay theories are also evident in the heuristics and biases that drive underinvesting for retirement (Bernartzi and Thaler 2007) and, more generally, represent a promising avenue for consumer research to understand (and improve) personal financial behaviors.

That being said, improving financial literacy seems challenging. The little research that exists suggests that the effectiveness of financial literacy programs is poor and/or uncertain (for a review, see Lusardi 2004; Lusardi and Mitchell 2007; see also Bell, Gorin, and Hogarth 2009; Cole and Shastry 2009). Importantly, some specific programs that have shown promise (e.g., Quick Enrollment, Save More Tomorrow; Choi, Laibson, and Madrian 2006; Keller and Lusardi 2012; Thaler and Benartzi 2004) may work primarily by simplifying decisions (e.g., through defaults and planning aids) rather than improving financial literacy. Our research also speaks to this challenge insofar as an intervention to improve loan literacy (i.e., information about loan terms and the dis/advantages of consolidation loans) had no impact unless coupled with an intervention to improve lender literacy (i.e., information about lender motives and tactics). Although these findings suggest that efforts to improve personal financial behaviors are difficult, we note that the combined approach was successful, implying that an emphasis on both dimensions in financial education programs might increase their effectiveness. Indeed, the low rates of lender literacy observed herein suggest that consumers may view lenders as agents acting in consumers' interests, rather than as sellers acting in their own self-interest. Questionable marketing may contribute to this perception with appeals that encourage trust combined with deceptive practices, such as appearing to offer credit counseling or signaling nonprofit status when the firm has other objectives. A better understanding of marketplace metacognition and lay theories of personal finance—regarding loans and lenders or, more generally, financial products and their providers—would be of great benefit in understanding how the marketing of financial products intended to help consumers can sometimes lead to harm.

Limitations

We acknowledge several limitations in this research program. First, we rely on self-report measures of intentions rather than actual behavior. Studying the impact of loan marketing and interventions on actual behavior over a period sufficient to encompass changing economic and personal conditions would be valuable but is, of course, challenging. To obtain added insights, we conducted a survey using a commercial financial panel of U.S. consumers and found correlational evidence linking more favorable attitudes toward debt consolidation with lower FICO scores (Bloom, Bolton, and Cohen 2010). Second, our loan-focused and lender-focused interventions were multifaceted, and further research might be useful to pinpoint which aspect of the information within each intervention had the most impact. It is perhaps not surprising that an effortful intervention might be necessary to affect entrenched behaviors in the domain of personal finances. Investigating the longer-term impact of such interventions is warranted.

Implications

This research has several pragmatic implications. First, consumers in serious financial difficulty who are considering debt consolidation loans may be especially vulnerable to current promotional practices, given low levels of financial literacy and the motivation to downplay longer-term negative aspects of debt consolidation (heightened by fears of immediate creditor actions). Findings showing that both loan and lender literacy are needed to improve financial decision making can be used by organizations that currently advocate for and provide consumer financial education (e.g., the National Endowment for Financial Education; credit counselors, schools, churches, and other educators) to create and/or improve informational interventions. Credit counselors are particularly valuable to educate distressed consumers who are targeted by marketers promising "debt relief." For that reason, we have developed an audiovisual form of our intervention that is currently under trial by a credit counseling agency that provides financial literacy seminars to consumers. Second, increasing awareness of why and how consumers are seduced by the apparent remedy of debt consolidation loans may increase the willingness of third parties to provide financial education about loan marketing. For example, the military (arguably a leader in this area) provides financial literacy programs during training, universities are already involved in providing financial assistance to students (and may want to reconsider their collaboration with debt consolidation marketing), and large employers could expand existing training that is part of benefits or employee assistance. (More generally, though, we note that the question of how to deliver financial literacy education effectively to consumers remains a challenge—as the current state of financial literacy attests.) Finally, responsible lenders, when put on notice as to serious consequences for consumers due to overpromoting the benefits of debt consolidation while underplaying downside consequences, might want to consider more balanced marketing approaches, perhaps as a way to differentiate themselves from less legitimate competition and/or to gain broader support from policy makers and regulators, such as the newly created Consumer Financial Protection Bureau.

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