

Financial Literacy Training Increases Implicit Preference for Spending

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Introduction

Financial literacy education has been found to be of limited effectiveness, especially over time (e.g., Fernandes, Lynch, & Netemeyer 2013). Although the reasons for this lack of effectiveness have been widely debated, no previous research has addressed the role of implicit attitudes in financial literacy. In four studies we show that financial literacy training can negatively impact implicit attitudes towards spending and saving while positively affecting explicit attitudes, that financial literacy training may increase willingness to pay for goods, and that it leads to increased feelings of shame and negative affect.

The Spending/Saving IAT

The Implicit Association Test (IAT; Greenwald, McGhee, & Schwartz 1998) has been widely used to study racism and other stereotypes. The IAT measures category preferences by pairing target concepts (such as men and women) and comparing the time it takes to categorize them when they are paired in different ways with valenced concepts (such as good and bad). Faster reaction times indicate a stronger association between the two concepts. As participants cannot consciously control their reaction times, the task reveals genuine, as opposed to socially desirable, responses. This makes the IAT an excellent tool for studying issues for which explicit questions may not elicit true responses. Because most consumers are well aware of the normative and socially desirable responses to questions about spending and saving preferences (i.e., most people should be spending less and saving more), the IAT is also well-suited for studying consumer attitudes in this area.

The Spending/Saving IAT created for these studies used the attribute labels good, bad, spending, and saving, with related words as stimuli (see Table 1).

Good	Bad	Spending	Saving
Marvelous	Horrible	Spend	Save
Superb	Agony	Buy	Thrift
Pleasure	Painful	Purchase	Frugal
Joyful	Terrible	Splurge	Budget
Wonderful	Awful	Shop	Economize

Table 1: Stimulus words used in the Spending/Saving IAT

(1) Implicit Attitudes and Financial Stress

Question: Do implicit attitudes towards spending and saving predict financial stress?

Methods: 133 MTurk participants completed the Spending/Saving IAT followed by questions about their levels of financial stress.

Results: Participants whose IAT scores showed that they preferred spending to saving had lower scores on the InCharge Financial Distress/Financial Well-Being Scale and a saving propensity scale, and higher scores on the Impulsive Buying Scale, and a variety of measures of financial stress (see Figure 1).

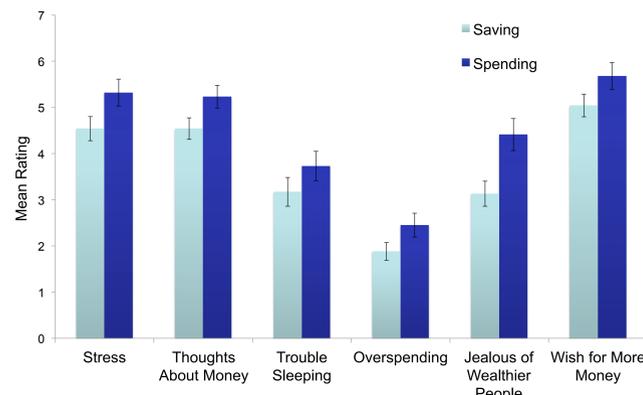


Figure 1: Stress about money by implicit spending or saving preference

(2) Financial Literacy Training and Attitudes

Question: Does financial literacy training affect implicit and explicit attitudes in the same way?

Methods: 106 MTurk participants were given the Spending/Saving IAT followed by attitude and knowledge questions about credit. Next, they were asked to read either a didactic or experiential piece on savings and credit. Participants then completed the credit questions and Spending/Saving IAT a second time.

Results: Responses did not differ by condition, so the conditions were combined for analysis. Explicit attitudes moved in the expected direction; that is, towards viewing credit card use as negative and expensive, and saving as positive [$t(105)=4.92, p<.001$], while implicit attitudes moved in the opposite direction, revealing an increased preference for spending [$t(105)=6.29, p<.001$]. (see Figure 2).

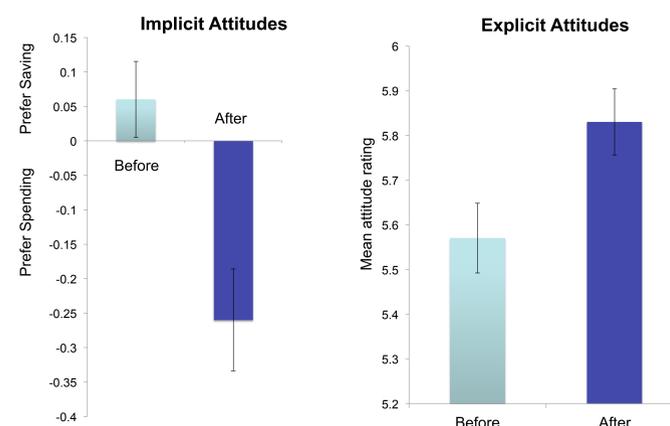


Figure 2: (a) Implicit and (b) explicit attitudes before and after financial literacy training

(3) Financial Literacy Training and Willingness to Pay

Question: Does financial literacy training increase individuals' willingness to pay for impulse purchases?

Methods: 200 MTurk participants read either a control or financial literacy reading, and were then asked to report their interest in purchasing, and willingness to pay for, eight goods (soda, cookie, candy bar, coffee, water, pizza, brownie, ice cream).

Results: Financial literacy training directionally increased purchase intention and willingness to pay compared to the control reading (see Figure 3).

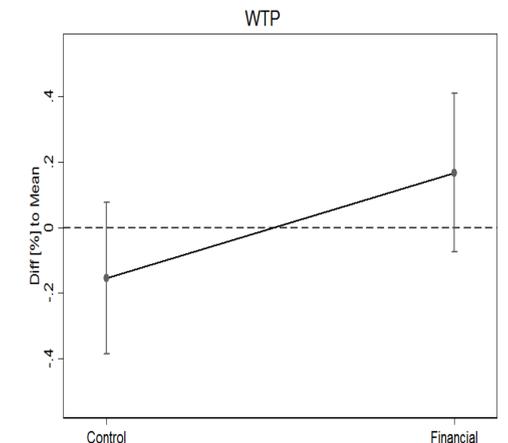


Figure 3: Willingness to pay for goods after control or financial literacy reading

(4) Financial Literacy Training, Shame, and Negative Affect

Question: Does financial literacy training have other unintended consequences, such as increased feelings of shame and negative affect?

Methods: 180 MTurk participants read either an excerpt from MyMoney.gov or an excerpt from the California DMV website on driver safety. Participants then completed a 4-item shame scale and the short-form Positive and Negative Affect Scale (PANAS; Mackinnon et al. 1999).

Results: Participants who read the financial literacy information reported significantly more feelings of shame [$t(179)=2.64, p=.009$], and more negative emotions [$t(179)=3.26, p=.001$] (see Figure 4).

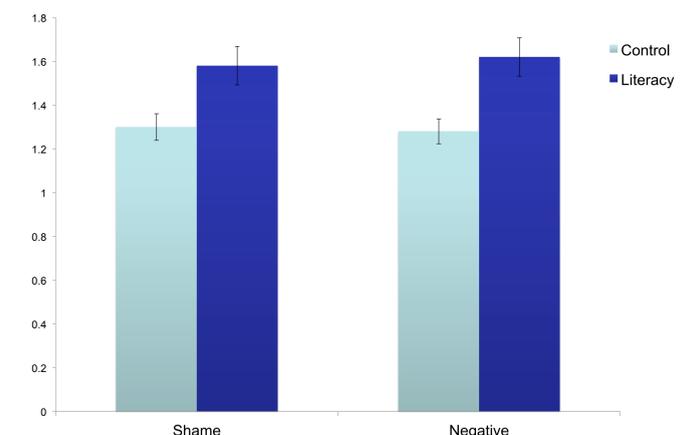


Figure 4: Shame and negative emotion after control or financial literacy reading

Conclusion and Discussion

Financial literacy training is a common method of attempting to improve spending and saving behaviors. While it does have a positive effect on explicit financial attitudes, it has a negative impact on implicit attitudes. It may also lead to increased feelings of shame and increases in negative emotion. These unintended consequences may help explain its lack of long-term effectiveness.