Available online at www.sciencedirect.com

ScienceDirect

Journal of Consumer Psychology 25, 2 (2015) 304 – 310

Research Report

Does dirty money influence product valuations?☆

Chelsea Galoni [a,*], Theodore J. Noseworthy [b]

[a] Kellogg School of Management at Northwestern University, 2001 Sheridan Rd., Evanston, IL 60208, United States
[b] Canada Research Chair of Entrepreneurial Innovation and the Public Good in the Schulich School of Business at York University, 99 Ian Macdonald Blvd, Toronto, ON M3J 1P3, Canada

Received 6 December 2013; received in revised form 6 November 2014; accepted 7 November 2014
Available online 14 November 2014

Abstract

Despite recent interest in examining the impact of dirty money on consumption-related behavior, researchers have yet to look at the influence of dirty money on the consumable itself. Evidence from two studies suggest that the documented effects of dirty money on spending may have more to do with dirty money contaminating the purchase, as opposed to the current belief that consumers merely want to rid themselves of disgusting things. The authors find that people indeed spend more with dirty money, but only when the bills lower product valuations. This does not occur when people purchase products with inherent properties that cannot be contaminated; in fact, dirty money can increase valuations and preference for these products. The results suggest that the physical appearance of money plays a much larger, more nuanced role in consumption than previously thought, and this effect may not be entirely positive for the consumer.

Keywords: Disgust; Contamination; Dirty money; Product valuations; Spending

Introduction

There has been growing interest in exploring the impact of dirty money (in the literal sense) on consumption-related behavior (Di Muro & Noseworthy, 2013; Yang et al., 2013). In a recent example, Di Muro and Noseworthy (2013) used crumpled new bills to tap normative beliefs that money is dirty. The authors found that disgust derived from worn bills encourages consumers to rid themselves of the notes, thus increasing spending. This is consistent with the finding that disgust can trigger goals of expelling (Lerner, Small, & Lowenstein, 2004). This work generated significant media attention under the premise that dirty bills may fuel the economy. Indeed, there may be a quantifiable benefit to leaving worn bills in circulation; however, researchers have yet to account for what this means for the products purchased with dirty money.

The law of contagion posits that when a source comes in direct or indirect contact with a target, the source can transfer some, if not all, of its properties to the target (Frazer, 1959 [1890]; Rozin & Nemeroff, 1990). The target then retains the properties received from the source even after the contact has been broken (Rozin & Nemeroff, 1990). This transference can happen for both positive and negative properties, and contact does not have to be physical for transference to occur (Nemeroff & Rozin, 1994; Rozin & Nemeroff, 1990). Evidence suggests that both consumers and products can be contagious. For example, Argo, Dahl, and Morales (2006, 2008) found that ratings for a particular product can be raised or lessened depending on the qualities of the people who came in previous contact with that product. Morales and Fitzsimons (2007) found that ratings for a particular product can be lessened if the product comes into physical contact with a normatively disgusting product (i.e., feminine napkins). This research offers evidence for how the contagious antecedents of a purchase can impact ratings for that purchase. Given that money is a required

☆ The authors would like to thank the NOESIS: Design, Innovation, and Consumption Laboratory. This research was funded by the Social Sciences and Humanities Research Council of Canada (SSHRC insights grant #435-2013-0235).
* Corresponding author.
E-mail addresses: c-galoni@kellogg.northwestern.edu (C. Galoni), tnoseworthy@schulich.yorku.ca (T.J. Noseworthy).

http://dx.doi.org/10.1016/j.jcps.2014.11.002
1057-7408/

and constant antecedent for purchases, we posit that money itself can be contagious; that is, the perceived properties of money can transfer and impact beliefs about the products it purchases. This idea is not without support.

What much of the research on negative contagion has in common is the concept of disgust. Disgust is a visceral emotion believed to have evolved specifically to serve the function of avoidance (Rozin, Haidt, & McCauley, 1993). Researchers have shown that unresolved disgust can lower selling and buying prices, and influence one's willingness to stick with the status quo (Han, Lerner, & Zeckhauser, 2012; Lerner et al., 2004). One very prominent source of disgust is the fear of pathogen transference (Tybur, Lieberman, & Griskevicius, 2009). Pathogen disgust can be elicited through visual cues that are normatively linked to pathogen presence, even when such cues are devoid of infectious agents (Rozin, Millman, & Nemeroff, 1986). Critically, pathogen disgust will often lead people to reject or *devalue* the seemingly contaminated object (Rozin & Fallon, 1987; Rozin & Nemeroff, 1990; Rozin et al., 1986; Rozin et al., 1989; Rozin et al., 1993). This is important because money itself is laden with pathogens. Recent research —aptly named the "Dirty Money Project"—conducted at New York University revealed that an average $1 bill (USD) houses over 3000 types of bacteria (Hotz, 2014). This statistic reflects a dominant belief in society that money is quite literally dirty. Thus, we propose that touching something that is normatively disgusting (e.g., dirty money) may transfer and affect the valuations of objects that are subsequently touched (e.g., a product). This idea is not as farfetched as it may seem. At one time or another, we have all been asked to wash our hands after touching something that is normatively filthy for fear of pathogen transfer. The following studies were designed to test this prediction.

Overview of the present research

We conducted two studies to investigate how dirty money can influence product valuations and consequently alter choice behavior and spending. In Study 1, we demonstrate that consumers who are disgusted by dirty bills put less value on their purchases and this leads them to seemingly compensate by buying more items. In Study 2, we explore whether the results of Study 1 are due to the threat of contamination of the products or due to goals of expelling the disgusting bills. The results support the former. Specifically, despite that consumers were generally disgusted by dirty bills, Study 1 replicated only when consumers were permitted to touch the products. Moreover, by unconstraining the choice of product category, we find that consumers who are disgusted by dirty bills become more likely to shop for cleaning products. Critically, if permitted to touch the cleaning products, product valuations increase and no compensatory spending takes place.

Study 1

In Study 1, we establish the phenomenon that dirty money can drop product valuations and this, in turn, can lead to increased consumption. Specifically, we provide individuals with either worn or crisp bills and then permit them to shop in a mock retail setting. We then record purchase quantity and total spending, as well as capture post purchase valuations of the products.

Method

Participants (N = 72, 67% female, M_{age} = 41.71) were recruited through advertisements and public posters, and were tested one at a time in a mock retail setting. Upon entering the setting, each participant was presented with a box consisting of several sealed white envelopes. Participants were informed that each envelope contained anywhere from $10 to $30. They were instructed to select one envelope, open it, take out the money, and confirm the amount. This ensured that participants touched the money before engaging in the retail transaction. Despite the guise, all envelopes contained a $20 bill. The range of the guise ensured that the $20 gain was not coded as a relative win or loss within the realm of chance. The only thing that varied between participants was whether the bill in the envelope was worn or crisp. Untarnished notes were requisitioned from a local bank. The worn condition was manipulated by crumpling and discoloring the bills whereas the crisp bills were left unaltered.

Upon taking the bill in hand, participants were directed to the store aisle. The products on the shelves were all food-related. What varied was their nutritional value under the guise that we were exploring if people select healthier versus less healthy snacks when awarded a cash windfall (see appendix). The products ranged from $1.00 to $3.50, and were organized such that an adjacent healthier option of equal price was always available. Participants were instructed to purchase at least one item and were instructed that all products purchased as well as the remaining change would be theirs to keep following the study.

Upon completing the selection, the cashier generated a receipt that recorded the experimental condition (using a non-descript identifier), the number and name of the products, and the entire basket amount. The cashier then administered the appropriate change along with a copy of the receipt. Participants were then directed to a cubicle to fill out a questionnaire.

In step with Di Muro and Noseworthy (2013), the manipulation check asked participants to judge the degree to which the bill they used was worn-out (anchored 1 = *not at all worn*, 7 = *very worn*). Participants were then instructed to focus specifically on how the bill made them feel, and respond to four 5-point items (anchored 1 = *not at all*, 5 = *extremely*) that captured perceived disgust (disgusted; unclean; dirty; revolted; Morales & Fitzsimons, 2007). Unlike Di Muro and Noseworthy who assessed the perceived value of the *bills*, participants were asked to rate the value of each of the *products* they purchased on eleven 7-point items (anchored 1 = *strongly disagree*, 7 = *strongly agree*). Five of the items tapped participants' perceptions of product value (has consistent quality; is well made; would not last long; something I would enjoy; something that would give me pleasure) and six items captured participants' perceptions of usage value (something that I would want to use; something that I would feel relaxed