

If I touch it I have to have it: Individual and environmental influences on impulse purchasing

Joann Peck^{a,*}, Terry L. Childers^b

^a University of Wisconsin-Madison, 3114 Grainger Hall, 975 University Avenue, Madison, WI 53706-1323, United States

^b University of Kentucky, United States

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Abstract

This research examines the influence of touch on impulse-purchasing behavior. We first replicate the Rook and Fisher [Rook DW, Fisher RJ. Normative influences on impulsive buying behavior. *J Consum Res* 1995;22:305–13.] studies about the moderating effect of the normative evaluation of impulse purchase on impulse-purchasing behavior. Extending the impulse-purchasing literature, we examine individual differences in touch and how they affect impulsive-buying behavior. Results from a field experiment suggest that both individual and environmental touch-related factors increase impulse purchasing.

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Almost all unplanned buying is a result of touching, hearing, smelling or tasting something on the premises of the store (Underhill, 1999, p. 158).

This paper focuses on how elements of touch can affect impulse purchasing. Buying impulsiveness is defined as a consumer's tendency to buy spontaneously, unreflectively, immediately, and kinetically. "Highly impulsive buyers are more likely to experience spontaneous buying; their shopping lists are more 'open' and receptive to sudden, unexpected buying ideas" (Rook and Fisher, 1995, p. 306). This research has two primary purposes. First, the research is designed to replicate the Rook and Fisher (1995) findings concerning the moderating effect of the normative evaluation of impulse purchase on an impulse-purchase trait and impulse-purchase behavior. This research also extends previous research by examining how the element of touch might affect impulse-purchase behavior. Specifically, individual differences in preferences for touch information are expected to relate to impulse purchasing through their common link to hedonic purchase motivations. In addition, encouragement to touch at point-of-purchase is expected to influence impulse purchasing.

1. Theoretical background

1.1. Impulse purchasing and touch

Limited evidence indicates that touch can influence behavior. In studies of the interpersonal touch domain (people touching people), restaurant servers who briefly touched customers received larger tips than servers who did not touch (Crusco and Wetzel, 1984; Hornik, 1992; Stephen and Zweigenhaft, 1986). Individuals who were asked to sign a petition were found to be more compliant if they were briefly touched (Willis and Hamm, 1980), and shoppers who were touched were more willing to participate in mall intercept interviews (Hornik and Ellis, 1988). While interpersonal touch seems to influence behavior, particularly compliance behavior, whether individual differences in touch will be related to impulse purchase behavior is not clear. Indirect evidence, however, suggests that product touch may influence impulse purchases, at least for some people. Kacen and Lee (2002) report that individuals who are more independent engage in greater impulse-purchase behavior than those who are interdependent in self-concept. Recent research by Ramathan and Menon (2002) also provides insight into the influence that touch may have on impulse purchasing. These researchers posit and find that individuals prone to impulsive

* Corresponding author. Tel.: +1 608 262 3603; fax: +1 608 262 0394.

E-mail address: jpeck@bus.wisc.edu (J. Peck).

behavior are driven by hedonic gratification. What's more, impulsive individuals are more inclined to pick up or touch a hedonic target (in this case, a cookie) than are non-impulsives. For instance, in study 2, the researchers report that 58 percent of impulsives picked up the cookie, while only 29 percent of non-impulsives touched the cookie. These results suggest that individual differences in touch are potentially important as we further our understanding of the antecedents of impulse-purchase behavior.

1.2. Impulse purchase and autotelic NFT

"It is people, not products, who experience consuming impulses" (Rook and Hoch, 1985, p. 23). The impulse-purchase trait is characterized by the lack of a salient purchase goal, at least at the start of the shopping experience. Researchers appear to agree that impulse buying involves a hedonic component (Cobb and Hoyer, 1986; Hausman, 2000; Rook, 1987; Rook and Fisher, 1995; Thompson et al., 1990; Ramanathan and Menon, 2002). Consumers report that when they purchase impulsively they feel uplifted (Cobb and Hoyer, 1986; Rook, 1987), and that they experience their needs for fun and novelty being fulfilled (Hausman, 2000). These studies offer conceptual support for a link between hedonic shopping motives and impulse-buying behavior.

Peck and Childers (2003) have reported individual differences in consumers' "need for touch" (NFT); i.e., their preferences and motivations for gleaning information through touch. While two components of NFT exist, the autotelic component of NFT relates to touch as a hedonic-oriented response seeking fun, arousal, sensory stimulation, and enjoyment (Holbrook and Hirschman, 1982). In the absence of a salient purchase goal, this autotelic component of touch corresponds to a more sensory form of processing. Results from two experiments indicate that individuals who report a preference for autotelic touch chronically access hedonic information from memory (Peck and Childers, 2003). Similarly, Ramanathan and Menon (2002) argue that hedonic gratification underlies most impulse behavior, and that for impulsives, hedonic motives are more chronically accessible. Additionally, a positive and significant correlation is reported between autotelic NFT and an individual trait scale measuring buying impulsiveness (Peck and Childers, 2003). By extension, autotelic NFT would also be positively related to actual impulse-purchase behavior, which leads to Hypothesis 1.

Hypothesis 1. Individuals higher in autotelic NFT will purchase more impulsively than individuals lower in autotelic NFT.

1.3. Impulse purchase and environmental salience of haptic information

"Planning is a relative term; consumers' plans are sometimes contingent and altered by environmental circumstances" (Rook, 1987, p. 191). Not only may individual characteristics increase impulse purchasing, but also characteristics of the environment

may affect impulse purchasing through increasing the salience of touch. The characteristics of the situation (Bloch and Richins, 1983; Houston and Rothschild, 1978) may increase interest in differentiated aspects of the environment and thus capture the consumer's attention. As Underhill (1999) notes, many consumers are influenced or that they make their decisions in-store versus outside of the store.

Unique aspects of the in-store environment, such as music, lighting, layout, and signage, may affect a consumer's decision process (Underhill, 1999). In particular, a point-of-purchase sign encouraging touch exploration may increase the salience of touch information motivating individuals to touch and impulsively purchase the displayed product. Support for this comes from Ramanathan and Menon (2002) who report that impulsive behavior occurred for both impulsives and non-impulsives when a hedonic goal was primed. The chronic accessibility of hedonic gratification combined with the primed hedonic goal elevated impulsive behavior for impulsives, while also stimulating hedonic gratification for non-impulsives as well. Thus, we expect that increasing the environmental salience of touch will stimulate increased impulse purchasing for both higher and lower autotelic NFT individuals. This leads to Hypothesis 2.

Hypothesis 2. Increasing the environmental salience of touch will increase impulse purchasing for higher and lower autotelic NFT individuals.

2. Overview of study

This study was designed to investigate the link between impulse purchasing and both an environmental encouragement to touch and an individual preference for autotelic touch. This study was also designed to replicate the Rook and Fisher (1995) findings concerning the relationship between the impulse-buying trait and impulse-buying behavior. The design was a 2 (high versus low autotelic NFT) × 2 (point-of-purchase sign "feel the freshness", or no sign) between-subjects design.

2.1. Procedure

This study took place in two parts. Part one consisted of a field experiment conducted in a Midwestern-city supermarket where shoppers were observed while they purchased peaches or nectarines. Shoppers who purchased at least one peach or nectarine were intercepted and asked to fill out a short half-page survey. (Only two shoppers approached the display but did not purchase the fruit.) The first part of the survey measured shoppers' level of impulse purchase. This survey also included a manipulation check to determine whether shoppers noticed the point-of-purchase sign we had displayed. Finally, shoppers were asked their name and address for a two-page follow-up survey. As an incentive to return the second part of the survey, shoppers were entered into a drawing to win a \$100 (U.S.) gift certificate toward supermarket purchases. This part of the study was completed in 3 weeks. The follow-up survey, which was

mailed, included the autotelic NFT scale, the buying-impulsiveness trait scale (Rook and Fisher, 1995), the normative evaluation of impulse purchase of peaches/nectarines, and demographic measures.

2.2. Sample

Two hundred and thirty-nine shoppers participated in part 1 of the study. After 2 weeks, 173 surveys were returned, with three unnamed, resulting in a usable sample size of 170 shoppers, for a response rate of 71 percent. The median age category for the respondents was 35–44 years. The median education level was a bachelor's degree (22 percent). The annual household income of the shoppers ranged from under \$10,000 (U.S.) per year to over \$100,000 per year. The median annual household income was \$60,000 to \$69,999 (U.S.). Thirty-eight members of the sample were male (22 percent).

2.3. Independent variables

2.3.1. Environmental touch salience

Environmental touch salience was manipulated by either posting a sign encouraging shoppers to “feel the freshness”, or by posting no sign over the fruit display. The sign followed the normal sizing for this supermarket so as not to be conspicuous, and measured only 9×6 in.

2.3.2. Autotelic NFT

Autotelic NFT was measured using the six-item autotelic NFT scale (Peck and Childers, 2003) with sample items: “Touching products can be fun”, and “I find myself touching all kinds of products in stores” ($\alpha=.94$). Scale item descriptors ranged from -3 (strongly disagree) to $+3$ (strongly agree) with the entire range represented in the sample. Higher and lower autotelic NFT were divided by a median split (eighty-seven individuals below the median were classified as lower in autotelic NFT vs. eighty-three classified as higher in autotelic NFT).

2.3.3. Buying-impulsiveness trait

The buying-impulsiveness trait was measured by the nine-item buying-impulsiveness scale ($\alpha=.74$) developed by Rook and Fisher (1995).

2.3.4. Normative evaluation of impulse purchase

The normative evaluation measure assumes that consumers may assess the appropriateness of buying something on impulse along a continuum that ranges from relative neutrality to strong disapproval or encouragement. The measure, also adapted from Rook and Fisher (1995), contained the following question: “You are planning to buy one type of fruit and you end up buying four types of fruit. How would this make you feel?” The shopper is given ten seven-point semantic differential scales ($\alpha=.88$) with endpoints good–bad, rational–crazy, wasteful–productive, attractive–unattractive, smart–stupid, acceptable–unacceptable, generous–selfish, sober–silly, mature–childish, right–wrong.

2.4. Dependent variables

2.4.1. Actual impulse purchase behavior

In-store buying impulsiveness was measured using three items adapted from Rook and Fisher (1995). The first item stated, “My decision to buy some type of fruit today was –.” The second item stated, “My decision to buy peaches/nectarines today was –.” And the third item stated, “My decision to buy the exact number of peaches/nectarines that I ended up purchasing was –.” All three items had a scale ranging from zero to 4, with zero being “completely planned” to 4 being “completely unplanned.” The three items were summed ($\alpha=.72$) for a measure of buying impulsiveness.

3. Results

3.1. Replication of Rook and Fisher (1995)

One purpose of this study was to replicate Rook and Fisher (1995) concerning the relationship between the impulse-buying trait and consumers' buying behaviors. Rook and Fisher (1995) found that consumers' normative evaluations moderated the degree or strength of the relationship between the buying impulsiveness trait and impulse-buying behavior. This study replicated the analyses used by Rook and Fisher (1995). The mean normative evaluation of purchasing four types of fruit in this study was 24.7, a finding that was slightly lower but comparable to those results obtained by Rook and Fisher (1995) in which study 1 found a mean of 30.4, and study 2 found means of 28.1 for the sweater and 28.7 for the CD. The reliability of the normative evaluation scale in this grocery store study was also comparable to the reliability obtained in the Rook and Fisher (1995) paper: for this study $\alpha=.88$, while for the Rook and Fisher findings, in study 1 $\alpha=.91$, and in study 2 $\alpha=.90$. A median split on shoppers' normative evaluations divided the sample into favorable (normative evaluation greater than or equal to 26, $n=79$) and unfavorable (normative evaluation less than 26, $n=90$) subsets.

Next, we compared product moment correlations across normative subgroups. In the normatively favorable group, the correlation between the buying-impulsiveness trait and actual impulse-buying behavior was significant ($r=.29$, $p<.05$); yet, in the normatively unfavorable group, the correlation was insignificant ($r=.06$, $p>.05$). A Fisher's z -transformation revealed that the two correlations differed significantly ($z=2.36$, $p<.05$). This finding replicates Rook and Fisher (1995) in both their study 1 and their study 2 (see Table 1).

Additionally, Rook and Fisher (1995) used a different basis for defining normative groups to examine the robustness of their findings. They divided the sample into three groups and again computed the within-group correlations for both their study 1 and their study 2. Our observational study, conducted in a grocery store setting, again replicated their findings that consumers' normative evaluations moderated the degree or strength of the relationship between the buying-impulsiveness trait and impulse-buying behavior. Our results are illustrated in Table 1.

Table 1
Correlations between impulse buying trait and actual impulse purchase

	Normatively unfavorable, median split	Normatively favorable, median split	Normatively unfavorable	Normatively neutral	Normatively favorable
Rook and Fisher, 1995: Study 1	$r = -.002$ $p > .10$ $n = 102$	$r = .33$ $p < .01$ $n = 110$	$r = .08$ $p > .10$ $n = 74$	$r = .10$ $p > .10$ $n = 69$	$r = .36$ $p < .01$ $n = 69$
Rook and Fisher, 1995: Study 2	$r = -.02$ $p > .10$ $n = 48$	$r = .36$ $p < .01$ $n = 52$	$r = .07$ $p > .10$ $n = 35$	$r = .03$ $p > .10$ $n = 33$	$r = .58$ $p < .001$ $n = 33$
This study	$r = .06$ $p > .10$ $n = 90$	$r = .29$ $p < .01$ $n = 79$	$r = .05$ $p > .10$ $n = 64$	$r = .17$ $p > .10$ $n = 59$	$r = .33$ $p < .01$ $n = 46$

3.2. Impulse purchase and autotelic NFT

The first hypothesis predicted that individuals higher in autotelic NFT would purchase more impulsively than individuals lower in autotelic NFT. Hypothesis 1 was supported with a significant main effect for autotelic NFT on impulse purchase ($M = 4.5$ and $M = 5.5$ for lower and higher autotelic NFT, respectively, $F[1,166] = 4.9$, $p < .05$). The two-way interaction was not significant ($p > .05$). In both the no-sign and the “feel-the-freshness” conditions, individuals higher in autotelic NFT purchased more impulsively than individuals lower in autotelic NFT. (In the no-sign condition, M values = 4.6 and 3.8 for high and low NFT, respectively, $F[1,166] = 3.2$, $p < .05$; in the “feel-the-freshness” condition, M values = 6.4 and 5.4, $F[1,166] = 3.2$, $p < .05$; Fig. 1.)

3.3. Impulse purchase and environmental salience of touch information

We predicted that when a point-of-purchase sign (“feel the freshness”) encouraged shoppers externally to touch, both high and low autotelic NFT shoppers would purchase more impulsively. This was supported with a main effect of environmental salience ($F[1,166] = 10.9$, $p < .05$). Individuals purchased more impulsively in the “feel-the-freshness” versus the “no-sign” conditions ($M = 5.9$ vs. 4.1). We expected that higher and lower autotelic individuals would be influenced by the point-of-purchase sign. As expected, both higher and lower autotelic NFT individuals purchased significantly more impul-

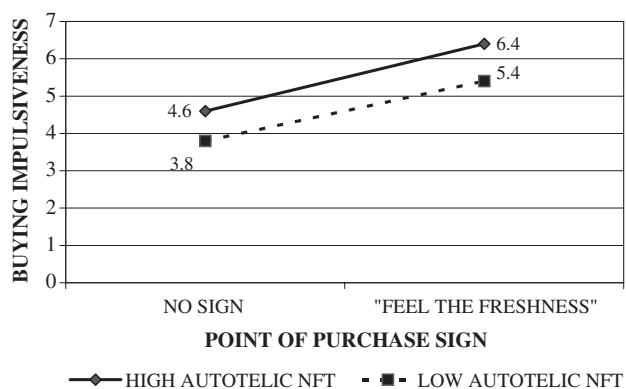


Fig. 1. Buying impulsiveness by autotelic NFT and point of purchase sign.

sively in the “feel-the-freshness” versus the no-sign condition (for higher autotelic NFT, M values = 4.6 and 6.4 for no sign and “feel the freshness”, respectively, $F[1,166] = 6.0$, $p < .05$; for lower autotelic NFT, M values = 3.8 and 5.4, $F[1,166] = 4.9$, Fig. 1). These results support Hypothesis 2 and indicate that both higher and lower autotelic NFT individuals were influenced by the presence of the sign increasing the environmental salience of touch information.

4. General discussion

4.1. Summary of findings

This study examines the relationship between impulse purchase and the individual difference in autotelic NFT, as well as an environmental encouragement to touch. In addition, the study replicated the research of Rook and Fisher (1995) with the correlation between the impulse-purchase trait and impulse-purchase behavior moderated by the normative evaluation of the impulse-purchase behavior. Results are consistent with expectations. Overall, individuals higher in autotelic NFT purchased more impulsively than their lower autotelic NFT counterparts. In addition, for both higher and lower autotelic individuals, the environmental salience of touch information induced by the “feel-the-freshness” point-of-purchase sign increased impulse-purchasing behavior.

4.2. Theoretical and managerial implications

While all individuals were influenced by increasing the environmental salience of touch information, some individuals (those higher in autotelic NFT) had a higher impulse-purchase baseline; that is, they were more likely to make impulse purchases overall. Puri (1996) describes impulsiveness as a result of the relative accessibility of the costs and benefits of impulsiveness. Perhaps individuals higher in NFT have the benefits of touch more accessible in memory than those lower in NFT. Evidence shows that touch information in general is more accessible to those who are higher versus lower in their NFT (Peck and Childers, 2003). We could argue that buying peaches or nectarines impulsively has minimal costs for individuals. Because of this, the accessibility of the fun and benefits of touch may drive impulse purchase. An accessibility explanation supports the finding that higher NFT individuals purchase more

impulsively than lower NFT individuals, and the result that increasing the environmental salience of touch information increases impulse purchasing. An interesting extension of this finding would be to repeat this study using a purchase in which the costs would be determined to be greater, perhaps by manipulating different types of products. In this case, the difference in impulse purchasing between higher and lower autotelic NFT individuals may be even more pronounced.

Another possible explanation involves the relative influence of affect and cognition. Shiv and Fedorikhin (1999) found that in a decision-making task, if processing resources are limited, affective reactions that are evoked spontaneously have a greater impact on the decision than do cognitions. A grocery store environment could be argued to be a cognitively demanding environment where resources are limited. Shoppers high in autotelic NFT may experience stronger affective reactions relating to the touch experience than those lower in NFT, which may in turn drive the increased level of buying impulsiveness. Examining physiological measures of higher and lower autotelic NFT individuals when they touch products that provide pleasant sensory feedback would be a method to investigate this.

For managers, the link between touch and impulse purchase has important implications. Touch in general was found to increase impulse purchasing. Because of this, point-of-purchase signs, displays, and packaging encouraging product touch may increase impulse purchasing for both low and high NFT shoppers. A note of caution is necessary. This research only investigated the link between impulse purchase and product touch for a product high in salience-of-touch attributes. Whether this would translate for a product moderately high or low in touch-attribute salience is not clear. However, increasing the opportunities for consumers to touch products through both in-store displays and store layout may increase impulse purchase.

This research replicated Rook and Fisher (1995) and extended research on impulse purchasing by looking at the role of touch and its relationship to impulse purchase. Both an individual touch variable (autotelic NFT) and an environmental touch variable (point-of-purchase sign encouraging touch) increased impulse purchasing. Additional research is required to examine further the mechanism by which touch leads to impulse purchase.

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