# The Pleasure of Assessing and Expressing Our Likes and Dislikes

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Although consumer behavior theory has traditionally regarded evaluations as instrumental to consumer choice, in reality consumers often assess and express what they like and dislike even when there is no decision at stake. Why are consumers so eager to express their evaluations when there is no ostensible purpose for doing so? In this research, we advance the thesis that this is because consumers derive an inherent pleasure from assessing and expressing their likes and dislikes. In support of this thesis, the results of seven studies show that compared to a variety of simple and commonplace control judgments, assessing and expressing one's likes and dislikes results in greater task enjoyment. This occurs because externalizing one's evaluations enables a form of self-expression that appears to be deep and global. These findings have important implications for marketers and policy makers.

Keywords: evaluation, browsing, attitudes, affect, self-expression, hedonics

A ccording to standard consumer behavior theory, people evaluate what they like and dislike in the marketplace in order to inform subsequent decisions, whether purchase or consumption (Engel, Kollat, and Blackwell 1968; Howard and Sheth 1969; Hoyer, MacInnis, and Pieters 2016). In other words, evaluations are generally conceived as serving the instrumental purpose of decision-making—an assumption shared by the standard economic

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theory of consumer choice. But is it true that consumer evaluations are formed solely to inform decisions and choices? Casual observation of everyday consumer behavior suggests that people formulate and express their likes and dislikes much more pervasively than would be justified by the need to make decisions. For example, it is common for consumers who are window shopping with friends and family to express what they like or dislike even when they have no purchase intention. Also revealing is consumers' willingness to indicate their likes and dislikes on social media platforms such as Reddit, even for posts and comments that other users are unlikely to see. Such examples bring to light an intriguing consumer behavior phenomenon that has yet to be explained scientifically: the fact that consumers often assess and express their evaluations of products and services even when there is no decision at stake. In other words, people frequently render evaluations in a seemingly gratuitous fashion.

We propose that part of the reason for rendering such evaluations is that consumers derive a subtle, hedonic benefit from assessing and externalizing their likes and dislikes. That is, formulating and expressing one's evaluations is inherently pleasurable. By "evaluation," we mean the act of assessing one's likes and dislikes (e.g., judging whether one likes some content on social media, or whether one

likes a product). By "inherently pleasurable," we mean that when consumers form and externalize their evaluations they derive a unique type of value, with a distinct hedonic quality, that is independent of the instrumental benefits of evaluation. In support of this proposition, we report seven experiments showing that, compared to other judgments that consumers commonly make, people find the assessment and expression of what they like or dislike to be inherently pleasurable, and that this phenomenon is driven at least in part by a process of self-expression.

Our article makes three major contributions. The first is expanding on the observation that in the marketplace consumers often make evaluations gratuitously—that is, even when no decision is at stake. The second contribution is advancing the novel theoretical proposition that the phenomenon occurs because consumers derive a subtle pleasure from assessing and externalizing their likes and dislikes. Our third contribution is identifying a major psychological process underlying this pleasure. In addition to these three primary contributions, we discuss important substantive implications of our findings for practitioners and policy makers.

# BEYOND INSTRUMENTAL EVALUATION: THE HEDONICS OF EXPRESSING EVALUATIONS

# Not All Evaluations Are for Decision-Making

Consumer behavior theory has historically limited its view of the process of product evaluation as instrumental to decision-making. In their seminal work Theory of Buyer Behavior, Howard and Sheth (1969) conceptualized evaluations, which they called "attitudes," as part of a learning process leading to the formation of intentions that culminate in purchase decisions. Still today, major consumer behavior texts discuss concepts such as attitudes and evaluations in the contexts of consumer choice and decisions (Hoyer, MacInnis, and Pieters 2016; Solomon 2017). This instrumental view of evaluation is similarly prominent in the attitude literature, which focuses largely on attitudes as predictors of behavior (Fishbein and Ajzen 1975; Petty and Cacioppo 1986). A comparable view can be found in standard economic theory, which links the process of utility assessment to choice and purchase (Read 2007; Stigler 1950 for a review).

We would argue, however, that a large proportion of consumer evaluation is not dictated by the need to inform a decision or behavior. Instead, consumer evaluations are frequently formed and externalized seemingly gratuitously. A consumer browsing a magazine may spontaneously say to a spouse, "I love that watch," even though he or she has absolutely no interest in buying a watch. Consumers who never go to the movies could exclaim that they hate a particular movie trailer even though there is no instrumental purpose for doing so. People often express to companions

whether they like or dislike the fashion choices of random strangers they cross paths with on the street. Social media users showing up late to an inactive thread on Reddit might still feel like rating a post in that thread, even though their evaluations will have no impact on the popularity of the content. Restaurant enthusiasts often enjoy arguing over "top dining spot" lists—the best places to go for sushi, who makes the best pizza—even though such rankings do not necessarily guide how they make their own daily dining decisions.

Why would consumers bother to form and express evaluations when doing so appears to serve no instrumental purpose? We propose that this is because doing so produces some inherent pleasure or experience utility. This proposition is broadly consistent with the general thesis that much of consumer behavior is experientially driven rather than instrumentally determined (Alderson 1957; Brakus, Schmitt, and Zarantonello 2009; Holbrook and Hirschman 1982; Pham 1998), and with the once-popular notion that attitudes may serve more than instrumental functions (Katz 1960; Schlosser 1998; Shavitt, Lowrey, and Han 1992; Snyder and DeBono 1985). To emphasize the idea that consumers derive some intrinsic experience utility from assessing and expressing their likes and dislikes, we refer to the phenomenon as "the pleasure of assessing and expressing our likes and dislikes."

We believe that similar to other important consumer behavior phenomena, such as the attraction effect (Huber, Payne, and Puto 1982), self-control failures (Ainslie 1975; Herrnstein and Prelec 1997; Hoch and Loewenstein 1991), and the greater happiness gained from experiences as opposed to material goods (Kumar and Gilovich 2015), the pleasure of forming and expressing evaluations is likely to be multiply determined (Pham 2013). In this article, we provide evidence in support of one major process explanation: that the phenomenon arises in part from the hedonic value of self-expression. (In the general discussion, we propose other potential explanations as avenues for future research.)

# Pleasure from Self-Expression

All humans have a fundamental need to affirm and maintain their self-identity (Dunning 2005; Rogers 1947), which is the core set of beliefs they hold as to who they are as an individual (e.g., "I am a successful business woman"; "I am a caring father"; "I am a world traveler"). In many societies, especially individualistic ones, this fundamental need is accompanied by a pervasive motivation to express one's identity—a process known as "self-expression" (Chernev, Hamilton, and Gal 2011; Kim and Sherman 2007; Maslow 1970). Self-expression can manifest through one's speech, writing, conduct, behavior, choices, productions, and so on (Belk 1988; Holbrook 1992; Kim and Ko 2007; Kleine, Kleine, and Kernan 1993). Indeed, much of consumption—shopping at Whole Foods versus Shoprite,

wearing Gucci versus Burberry, watching CNN versus FOX—can be seen as forms of self-expression.

Along with one's general attributes, such as gender, profession, and nationality, an important aspect of identity is what one likes and dislikes (Gollwitzer and Kirchhof 1998). Being an opera lover as opposed to a rock enthusiast, or preferring to purchase organic and fair-trade coffee over Dunkin' Donuts' coffee, is an idiosyncratic and thus highly revealing reflection of who we are as a person. This idea is consistent with Katz's (1960) classic proposition that attitudes can have a value-expressive function. In this somewhat forgotten work, Katz (1960) originally theorized that people hold certain attitudes (e.g., "I love French culture") for the purpose of affirming their core identity. While Katz focused on long-held attitudes (e.g., having conservative political views; caring about animal rights), we argue that expressing evaluations made "on the spot" in consumption contexts—such as consumers evaluating and externalizing whether they like a particular dress or a movie they just watched—highlights personal qualities that are similarly revealing. In other words, we believe that even the externalization of one's momentary evaluations, not just one's longterm attitudes, enables a sense of self-expression.

Building upon prior work showing that the disclosure of self-relevant information is pleasurable (Petrie et al. 1995; Stanton et al. 2002; Tamir and Mitchell 2012), we argue that because one's likes and dislikes are particularly idiosyncratic to the self (Zajonc 1980), consumers will derive some inherent pleasure from forming and externalizing such evaluative judgments because they are highly self-expressive. In summary, we propose that consumers' eagerness to evaluate things even when nothing is at stake arises from the inherent pleasure that consumers derive from making and then externalizing their evaluations—pleasure that accrues in part from the hedonics of self-expression.

# Overview of the Studies

To test the proposition that the mere expression of one's likes and dislikes is inherently pleasurable, we conducted a series of seven experiments involving more than 5,700 participants. (Another seven experiments, which replicate the main findings, are described in the supplementary materials provided in the web appendix.) In all experiments, we compared how much participants enjoyed the task of making and reporting a series of simple like/dislike judgments relative to making and reporting a variety of simple nonevaluation-based judgments, which served as the control conditions. To ensure that the results were not driven by the comparison judgment used in the control conditions, the non-evaluation-based comparison judgments were purposefully selected to ensure that they were (a) simple to make: (b) relevant to and commonly made by consumers: (c) not inherently unpleasant; and, importantly, (d) varied

across studies, thereby ensuring that the findings were not unique to any one comparison judgment.

Study 1 demonstrates the basic phenomenon in a laboratory setting in a relatively realistic marketplace context. These results are conceptually replicated in study 2 using a different experimental paradigm, showing that consumers indeed find the task of assessing and expressing their likes and dislikes to be more enjoyable than making and reporting a variety of simple non-evaluation-based judgments. Across six studies (studies 2–7), we consistently show that the phenomenon is driven in part by the hedonics of selfexpression. Studies 5 and 7 help refine the self-expression account by revealing that the pleasure of forming and externalizing one's evaluations is rather rich and reflects a fairly broad self-concept, akin to the pleasure one gets from externalizing assessments that are deeply selfexpressive. In addition, we show that the inherent pleasure of assessing and expressing one's likes and dislikes holds not only when the targets of evaluation are generally appealing, but also when the targets are less appealing (study 6), suggesting that people derive pleasure from assessing and expressing not just what they like but also what they dislike.

# STUDY 1: IS THERE DISTINCT PLEASURE IN ASSESSING AND EXPRESSING ONE'S LIKES AND DISLIKES?

The purpose of the first study was to document the basic phenomenon and test the prediction that people derive more pleasure from assessing and expressing whether they like or dislike various products than from making and externalizing a comparable judgment that is non-evaluation-based. Participants were asked to browse the website of a popular apparel retailer, and to identify and record clothing items that they particularly liked or disliked (in the evaluation condition), or items they found to be particularly monotone or colorful (in the control condition). We predicted that relative to participants who recorded items based on colorfulness, participants who recorded items based on whether they liked them would report greater enjoyment.

#### Method

Eighty-four student participants at a large US university (67.9% women) were brought to a behavioral lab and asked to browse freely through the website of the major apparel retailer Abercrombie & Fitch (A&F). This particular retailer was chosen because (a) apparel is a familiar category with products that are easily amenable to both evaluation-based and non-evaluation-based judgments; (b) A&F sells both men's and women's clothing, making its products relevant to all participants; and (c) the brand is well known

among the student population and relatively affordable, reducing issues of differential brand familiarity and price sensitivity.

Under the cover of a study on consumers' reactions to A&F's products, all participants were asked to browse the company's website to identify and record items that they either "particularly liked or disliked" (evaluation condition) or found "particularly colorful or monotone" (control condition). They were given five minutes to complete their respective tasks and were provided with a sheet of paper to record the identified items and indicate whether they liked or disliked the item, or whether they deemed the item to be monotone or colorful. Upon completion, all participants were asked to rate "How fun was this task?" on a scale of 1 ("Not fun at all") to 7 ("Very fun"), which was the main dependent variable. As control measures, participants were additionally asked to respond to the following: "Compared to other consumers, how much do you enjoy window shopping and browsing for clothes in stores, catalogs, and online?" (1 = "I dislike it a lot"; 7 = "I like it a lot"); and "How often do you browse the Abercrombie & Fitch website?" (1 = "Never"; 5 = "Very often").

#### Results

There were no differences in participants' reported enjoyment of shopping in general (F(1, 82) = 2.66, NS) or in their familiarity with the A&F site across conditions (F < 1). Therefore, any difference in task enjoyment across conditions cannot be attributed to preexisting differences in propensity to find the task and stimuli enjoyable. There was also no difference in the number of items recorded across conditions (F < 1), suggesting that the two tasks were comparable in terms of difficulty and participant engagement.

More importantly, consistent with our prediction, participants who were asked to identify and write down the names of items that they particularly liked or disliked on the website reported enjoying the task more (M = 5.04) than did those who were asked to identify and record items that they found to be particularly colorful or monotone (M = 4.23; F(1, 82) = 6.07, p = .02,  $\eta^2 = .069$ ).

#### Discussion

In this first laboratory experiment, participants were given the latitude to browse through the website of an actual retailer as they naturally would while shopping online. Consistent with the proposition that there is an inherent pleasure in assessing and expressing one's likes and dislikes, participants who were asked to perform an evaluation-based judgment task found it to be significantly more enjoyable than did participants who were asked to perform a comparable non-evaluation-based judgment task. These results cannot be explained by differences in involvement or difficulty between conditions. However,

given that participants were allowed to freely navigate the retailer's website, it is possible that differences in enjoyment could have been driven by differences in the types of products that participants reviewed across conditions. In addition, one could argue that the finding may be specific to the particular non-evaluative judgment that we used in the control condition. We address these issues in study 2.

# STUDY 2: COMPARING LIKE AND DISLIKE JUDGMENTS TO DIFFERENT NON-EVALUATIVE JUDGMENTS

To address the possibility that the results of study 1 were due to participants reviewing and assessing different products across conditions, participants in study 2 were presented with an identical set of products to assess. They were shown a set of popular T-shirts from an actual online retailer and asked to form and express either evaluationbased judgments of these T-shirts or non-evaluation-based judgments. In addition, to address the possibility that the results of study 1 were specific to the particular control condition used in that study, study 2 contained four conditions: one treatment condition and three control conditions. In the treatment condition, participants were asked to assess and express whether they liked or disliked each Tshirt. In the three control conditions, participants were asked to form and externalize one of three types of nonevaluation-based judgments. The control judgments were all selected to be simple, commonly made by consumers, relevant for T-shirts, and not inherently aversive, thus providing meaningful benchmarks against which to compare like/dislike judgments. We predicted that compared to participants asked to form and express any of the nonevaluation-based control judgments, participants asked to assess and express whether they liked or disliked each Tshirt would report greater enjoyment of the task.

In addition to providing more controlled evidence for the basic phenomenon, a second objective of study 2 was to test whether observed differences in enjoyment were indeed driven (at least in part) by differences in the selfexpressiveness afforded by the judgments.

#### Method

Under the guise of a market research study, 2,028 US-based participants from the Amazon Mechanical Turk (MTurk) panel (50.9% women) were asked to form a particular judgment about each of 10 T-shirts selected from a large online retailer, and then to rate how much they enjoyed performing this task. We selected T-shirts for three reasons. First, T-shirts are familiar products that are relevant to most consumers. Second, T-shirts are often unbranded and typically sold within a fairly narrow price range, which circumvents issues of brand familiarity and price sensitivity. Third, and more importantly, T-shirts are amenable to a

variety of simple, commonplace consumer judgments that are either evaluation-based or non-evaluation-based. The T-shirts selected for this study were unisex, covered a broad range of colors, and featured a large graphic with limited or no text and no brand information or logo.

Participants were randomly assigned to one of four judgment conditions: a treatment condition in which they were asked to form and express evaluation-based judgments, or one of three control conditions in which they were asked to make and express comparable but non-evaluation-based judgments. The T-shirts were presented and judged one at a time in a fixed sequence, with participants proceeding at their own pace. Those in the evaluation condition were asked to assess each of the 10 T-shirts with a simple question—"Do you like or dislike this T-shirt?"—to be answered on a dichotomous scale: "I like it" and "I dislike it." Participants in the control conditions also used dichotomous scales to express one of three non-evaluation-based judgments about each T-shirt. Although all were simple, commonplace, and relevant to the category, the three control judgments varied in their degree of abstractness and configurality. In one control condition, participants were asked to judge whether each T-shirt was "very colorful" or "not very colorful," which is a unidimensional judgment based on a single concrete attribute (color). In a second control condition, participants were asked to judge whether each T-shirt was "more casual" or "less casual," which is a slightly more abstract and configural judgment that may involve a combination of features such as color and graphic design. Finally, in the third control condition, participants were asked to judge whether each T-shirt "matches" or "does not match" a baseball cap presented on the screen, an even more abstract and configural judgment that involves an appraisal of the T-shirt as a whole and its fit with another product. The variety of control judgments used in this study ensures that the findings are not dictated by the specific nature of the control judgments to which evaluation-based judgments are compared.

After performing their judgment task for all the T-shirts, participants reported their task enjoyment on two seven-point scales anchored at 1 = "I did not enjoy this task at all"; 7 = "I enjoyed this task very much" and 1 = "I feel it was not fun at all"; 7 = "I feel it was very fun." Responses to these two items were averaged into an index of task enjoyment ( $\alpha = .95$ ), which served as the main dependent measure. In addition to indicating their task enjoyment, as a process measure for self-expressiveness, participants were asked to rate, "To what extent do you feel you expressed something about yourself during this task?" on a scale of 1 ("I expressed very little about myself") to 7 ("I expressed a lot about myself").

To control for various potential alternative explanations of the results, the amount of time that participants took to complete the 10 judgments was recorded. Participants were additionally asked to complete three sets of measures.

First, they rated their task involvement on two items: "How seriously did you take this task?" (1 = "Not seriously at all"; 7 = "Very seriously") and "How carefully did you complete this task?" (1 = "Not carefully at all"; 7= "Very carefully") ( $\alpha = .89$ ). Next, they rated their general enjoyment of browsing and shopping on two items, indicating (a) how much they enjoy browsing products on the internet (1 = ``I do not enjoy it at all''; 7 = ``I enjoy it)very much"); and (b) how much they enjoy window shopping and browsing for clothes in various types of outlets such as stores and catalogs (1 = ``I dislike it a lot''; 7 = ``Ilike it a lot") ( $\alpha = .78$ ). Finally, to assess their general affinity toward T-shirts, participants were asked to report (a) how often they shop for T-shirts (1 = "Very often"; 5 ="Never"); (b) how often they wear T-shirts during the summer (1 = "Very often"; 5 = "Never"); and (c) how they dress on a typical day (1 = "Very casual"; 5 = "Very formal"). Responses to these items, which were moderately correlated ( $\alpha = .54$ ), were combined into a formative index of affinity toward T-shirts in general. (Note that formative construct indicators tend to have lower intercorrelations than reflective construct indicators.)

# Results

Preliminary Analyses. There were no differences in terms of general enjoyment of browsing and shopping (F < 1) or general affinity toward T-shirts across conditions (F < 1). However, participants in the evaluation condition reported higher task involvement (M = 6.55) than did participants in the non-evaluation conditions  $(M_{\text{Casualness}} = 6.40 \text{ vs. } M_{\text{Colorfulness}} = 6.45 \text{ vs. } M_{\text{Match}} = 6.42; F(3, 2020) = 2.92, p = .03, <math>\eta^2 = .004$ ). As reported below, controlling for this difference in the analyses does not change the main results.

Participants in the evaluation condition took somewhat longer to complete the 10 judgments (M = 59.58 s) than participants in the colorfulness-judgment condition (M = 49.24 s; F(1, 2024) = 5.90, p < .02,  $\eta_p^2 = .003$ ), and about the same amount of time as participants in the casualness-judgment condition (M = 53.81; F(1, 2024) = 1.83, NS) and in the cap-matching condition (M = 54.64 s; F(1, 2024) = 1.37, NS). These completion time results suggest that the evaluation judgments were not significantly easier than the different control judgments. Therefore, one cannot attribute a greater enjoyment of evaluation to a greater ease or fluency of the task relative to the various control judgments. Additional evidence against this alternative explanation is reported in the discussion section.

Task Enjoyment. An omnibus ANOVA revealed significant differences in task enjoyment across conditions (F(3, 2024) = 10.34, p < .01,  $\eta^2 = .015$ ). As reported in table 1, participants who expressed whether they liked or disliked the T-shirts reported enjoying the task more (M = 5.96)

TABLE 1
STUDY 2: MEANS AS A FUNCTION OF TYPE OF JUDGMENT

	Study 2			
	Evaluation (n=505)		Colorfulness (n=505)	
Enjoyment Expressiveness	5.96 5.35	5.59 4.57	5.59 4.66	5.57 4.70
Time Involvement Browsing enjoyment Difficulty <sup>a</sup>	59.58 s 6.55	53.81 s 6.40 5.38 2.11	49.24 s 6.45 5.36 2.05	54.64 s 6.42 5.35 2.26

<sup>&</sup>lt;sup>a</sup>Measured in a separate post-test (n=243).

than did participants who externalized each of the three control judgments: assessing the T-shirts in terms of colorfulness (M = 5.59; F(1, 2024) = 20.38, p < .01,  $\eta_p^2 = .010$ ), casualness (M = 5.59; F(1, 2024) = 19.49, p < .01,  $\eta_p^2 = .010$ ), and how well they matched the baseball cap (M = 5.57; F(1, 2024) = 22.13, p < .01,  $\eta_p^2 = .011$ ). Task enjoyment was significantly higher in the evaluation condition than in the combination of the three non-evaluation-based control conditions (F(1, 2024) = 30.93, p < .01,  $\eta_p^2 = .015$ ), which did not differ significantly from one another (F < 1). (It should be noted that the effect sizes in our original studies, which are reported in the web appendix, were substantially larger. It is possible that over time, the sampled population of MTurk participants became somewhat desensitized to our basic paradigm.)

To test the possibility that the effect could be due to differences in involvement across conditions, participants' task enjoyment was submitted to an ANCOVA with task involvement as a covariate. The analysis shows that even after we controlled for task involvement, participants in the evaluation condition still reported a higher level of task enjoyment ( $LS-M_{\rm Evaluation}=5.91$ ) than did participants in any of the non-evaluation-based conditions ( $LS-M_{\rm Casualness}=5.62$ ; F(1, 2019)=13.22, p<.01,  $\eta_{\rm p}^2=.007$ ;  $LS-M_{\rm Colorfulness}=5.59$ ; F(1, 2019)=17.26, p<.01,  $\eta_{\rm p}^2=.008$ ;  $LS-M_{\rm Match}=5.59$ ; F(1, 2019)=16.60, p<.01,  $\eta_{\rm p}^2=.008$ ). Therefore, it is unlikely that the results were due to difference in task involvement.

Mediation Analysis. An ANOVA revealed similar differences in perceived self-expression across conditions  $(F(3, 2020) = 22.30, p < .01, \eta^2 = .032)$ . Participants who externalized whether they liked or disliked the T-shirts reported expressing more of themselves (M = 5.35) than did participants who externalized any of the three control judgments: assessing the T-shirts in terms of colorfulness  $(M = 4.66; F(1, 2020) = 41.75, p < .01, \eta_p^2 = .020)$ ,

casualness (M = 4.57; F(1, 2020) = 52.72, p < .01,  $\eta_p^2 = .025$ ), and how well they matched the baseball cap (M = 4.70; F(1, 2020) = 37.36, p < .01,  $\eta_p^2 = .018$ ). To test for the mediating role of self-expressiveness, we conducted a mediation analysis using model 4 of the PROCESS macro with 5,000 bootstrapped samples (Hayes 2018). As predicted, the results showed that task enjoyment was significantly mediated by perceived self-expression (B = .279, confidence interval [.217, .343]).

# Discussion

The results show that, as predicted, participants who were asked to indicate their liking and disliking of a series of T-shirts found the task to be significantly more enjoyable than did participants who were asked to report a variety of control judgments not based on likes or dislikes. (Two replications of these results are reported in the web appendix.) The results additionally provide evidence that differences in enjoyment are driven in part by differences in the perceived self-expression elicited by the tasks. Given the variety of control judgments used, as well as their everyday nature, general simplicity, and the fact that there is nothing particularly aversive in any of them, it is unlikely that the observed differences in task enjoyment are driven simply by the particular comparison judgments that we selected. For example, the similarity of the findings across all three comparison judgments, which differed in their levels of abstractness and configurality, makes it unlikely that the results are driven by differences in concreteness versus abstractness between evaluation-based judgments and the selected comparison judgments.

One plausible alternative explanation for the observed findings is that making and externalizing the evaluation judgments may have been more enjoyable simply because they were easier to render or more fluent than the various control judgments. Three lines of evidence seem to contradict this explanation. Given the commonplace nature of the three control judgments, it is unlikely that the results are driven by the sheer familiarity of evaluation-based judgments relative to the control judgments. More importantly, we found that, if anything, the evaluation task took somewhat longer than the various control tasks. (Similar results were found in the subsequent studies.) Given the wellestablished relationship between task difficulty and completion time (Aula, Khan, and Guan 2010; Hick 1952; Kim 2006), this finding suggests that the main findings were not driven by the evaluation task being easier. Further evidence comes from a post-test in which another group of 243 MTurk participants were randomly assigned to complete one of the four tasks in the main study, and then were asked to rate how difficult they found the task to be on a scale of 1 ("Not difficult at all") to 7 ("Very difficult"). The results, reported in table 1, showed no differences in perceived difficulty across tasks (F(3, 239) = 1.28, NS).

<sup>1</sup> The change in degrees of freedom in the ANCOVA is due to four participants not completing the involvement measures administered at the end of the survey.

# STUDY 3: EXPERIMENTAL EVIDENCE OF SELF-EXPRESSIVENESS AS A DRIVER OF THE PLEASURE OF LIKING AND DISLIKING

The purpose of study 3 was to further test the proposition that the phenomenon is driven in part by selfexpressiveness. Logically, if the pleasure of externalizing one's likes rests on the hedonics of self-expression, the superior enjoyment of evaluative judgments relative to control judgments should be more evident when people are able to externally express their evaluations than when they are unable to do so. Using a similar paradigm as in study 2, we asked participants in study 3 either to evaluate whether they liked or disliked a series of T-shirts or to assess whether the T-shirts were more or less casual. In one condition, participants were asked to report their respective judgments externally, as in study 2. In the other condition, participants were asked to make these judgments only privately (without reporting them externally). If it is indeed the pleasure of *expressing* one's likes and dislikes that is enjoyable, the greater pleasure of evaluation (compared to a non-evaluation-based judgment) should be more pronounced in the external-judgment condition than in the private-judgment condition. Moreover, if the phenomenon is indeed driven in part by self-expressiveness, perceived self-expression should mediate differences in enjoyment between the evaluation and casualness conditions, particularly when the judgments are externalized (vs. privately formed).

# Method

One thousand three hundred twenty-six MTurk participants (44.7% women) were randomly assigned to the conditions of a 2 (type of judgment: evaluation vs. casualness) × 2 (judgment reporting: external vs. private) betweensubjects design. Participants were presented with the same set of 10 T-shirts as in study 2 and asked either to evaluate whether they liked or disliked them or to form a nonevaluation-based judgment, which in this experiment was assessing whether the T-shirts were more or less casual. In the external-judgment condition, participants were asked to report their judgments explicitly on the same response scales as the ones provided in study 2. Specifically, for each T-shirt, participants in the evaluation condition were asked, "Do you like or dislike this T-shirt?" and they provided their responses on an "I like/dislike it" binary scale, whereas participants in the control condition were asked, "Is this T-shirt less casual or more casual?" and provided their responses on a "less/more casual" binary scale.

In the private-judgment condition, participants were instructed to form their assigned judgments "in [their] head." For each T-shirt, participants in the evaluation condition were asked, "Please answer this question in your

head: Do you like or dislike this T-shirt?", whereas participants in the control condition were asked, "Please answer this question in your head: Is this T-shirt less casual or more casual?" To compel participants in the private-judgment condition to actually form these judgments mentally, they were led to believe that they would be asked to report their judgments "after [they had] reviewed all of the T-shirts."

After participants had judged all 10 T-shirts (either externally or only privately), they reported their enjoyment of the task ( $\alpha = .93$ ) as well as the degree of self-expression elicited by the task, task involvement ( $\alpha = .89$ ), T-shirt affinity ( $\alpha = .41$ ), and general browsing enjoyment ( $\alpha = .81$ ) on the same measures as in study 2. After completing these measures, all participants were asked to recall their previous judgments of the T-shirts. Participants in the evaluation condition—both external and private—were presented with the 10 T-shirts again, on a single page, and asked to indicate which ones they liked, whereas participants in the control condition were asked to indicate which ones were more casual. The time that it took participants to complete this task was recorded to address a potential alternative explanation of the results, to be explained in the discussion of this experiment.

#### Results

Preliminary Analyses. Analyses similar to those of studies 1 and 2 again indicated no differences in task involvement, general enjoyment of browsing and shopping, or general affinity toward T-shirts across conditions (largest F(1, 1322) = 1.76, NS). To address the possibility that differences in enjoyment observed within the external condition were driven by the relative ease of the evaluation versus casualness task, we ran a similar ANOVA that confirmed no differences in the amount of time taken to complete the tasks ( $M_{\rm Evaluation} = 66.74\,{\rm sec}$  vs.  $M_{\rm Casualness} = 61.69\,{\rm sec}$ ; F < 1). This finding is consistent with a simple-effects test from the post-test reported in study 2, which showed that the evaluation task was rated as similarly difficult as the casualness task ( $M_{\rm Evaluation} = 1.72\,{\rm vs.}$   $M_{\rm Casualness} = 2.11$ ; F(1, 239) = 1.70, NS).

Task Enjoyment. A  $2 \times 2$  ANOVA of participants' reported level of task enjoyment again revealed a main effect of type of judgment ( $F(1, 1322) = 7.51, p < .01, \eta^2 = .006, \eta_p^2 = .006$ ). Consistent with the previous studies, participants who evaluated their likes and dislikes reported on average higher task enjoyment (M = 5.69) than did those who assessed whether the T-shirts were more or less casual (M = 5.50). More importantly, this effect was qualified by a significant interaction with judgment reporting ( $F(1, 1322) = 5.16, p = .02, \eta^2 = .004, \eta_p^2 = .004$ ). As shown in table 2, task enjoyment was greater among participants who evaluated their likes and dislikes than among

TABLE 2
STUDY 3: MEANS AS A FUNCTION OF TYPE OF REPORTING
AND TYPE OF JUDGMENT

	Study 3			
	External judgment		Private judgment	
		Casualness (n = 336)		
Enjoyment Expressiveness	5.78 5.23	5.42 4.36	5.61 4.67	5.57 4.23
Time Involvement Browsing enjoyment	67.68 s 6.39	63.21 s 6.43 4.80	65.74 s 6.43 4.82	60.08 s 6.39 4.72

participants who assessed the casualness of the T-shirts, but only when these judgments were expressed externally  $(M_{\rm Evaluation}=5.78~{\rm vs.}~M_{\rm Casualness}=5.42;~F(1,~1322)=12.88,~p<.01,~\eta_{\rm p}^{~2}=.010).$  When the judgments were formed only privately, the effect did not hold  $(M_{\rm Evaluation}=5.61~{\rm vs.}~M_{\rm Casualness}=5.57;~F<1).^2$  These findings suggest that the hedonic benefit of evaluating one's likes and dislikes is largely contingent on the ability to externally express these evaluations. This is consistent with the proposition that the phenomenon rests in part on mechanisms of self-expression. We also find that this pattern of results is robust: it was replicated across two independent samples of participants (see the web appendix).

*Mediation Analysis*. A similar  $2 \times 2$  ANOVA of perceived self-expression yields significant effects of type of judgment ( $F(1, 1322) = 44.41, p < .001, \eta^2 = .033, \eta_p^2 = .032$ ), judgment reporting ( $F(1, 1322) = 12.12, p = .001, \eta^2 = .009, \eta_p^2 = .009$ ), and their interaction on self-expression ( $F(1, 1322) = 5.16, p < .025, \eta^2 = .004, \eta_p^2 = .003$ ; see table 2). Specifically, perceived self-expression was greater among participants who evaluated their likes and dislikes than among participants who assessed the casualness of the T-shirts, particularly when these judgments were expressed externally (External:  $M_{\rm Evaluation} = 5.23$  vs.  $M_{\rm Casualness} = 4.36$ ;  $F(1, 1322) = 40.21, p < .001, \eta_p^2 = .030$ ). When the judgments were formed only privately, the effect was weakened (Private:  $M_{\rm Evaluation} = 4.67$  vs.  $M_{\rm Casualness} = 4.23$ ;  $F(1, 1322) = 9.77, p < .01, \eta_p^2 = .007$ ).

Next, to test whether observed differences in task enjoyment across conditions were indeed due to differences in perceived self-expression, we conducted a moderated mediation analysis of the observed interaction between type of judgment and judgment reporting, using model 7 of the PROCESS macro with 5,000 bootstrapped samples (Hayes 2018). The results indeed indicate significant moderated mediation (B = .077, with a bias-corrected 95% confidence interval that does not include 0 [.006, .147]). Task enjoyment was significantly mediated by perceived self-expression in the external condition (B = .156, confidence interval [.111, .205]) and, to a lesser extent, in the internal condition (B = .079, confidence interval [.027, .133]).

## Discussion

The results of study 3 replicate once more the basic finding that reporting one's like or dislike of a product is more pleasurable than reporting a comparable, non-evaluationbased judgment about the same product, thereby lending further support to the proposition that assessing and expressing one's likes and dislikes is inherently pleasurable. More importantly, the results provide convergent evidence of the mechanism underlying this phenomenon. Specifically, the results show that the pleasure of evaluation is contingent on people's ability to express their judgments externally. Whereas participants who externally expressed their likes and dislikes reported greater enjoyment than those who expressed comparable nonevaluation-based judgments, participants who formed their judgments only privately did not exhibit the same difference in enjoyment. Viewed from another angle, participants assessing their likes and dislikes experienced significantly greater pleasure if they were allowed to express their likes and dislikes externally than if they made their assessments only privately, whereas participants making non-evaluation-based judgments of the products did not experience greater pleasure from externalizing their judgments. Therefore, it is not the externalization of any judgment that participants found distinctively enjoyable, but rather the externalization of evaluation-based judgments in particular. Finally, a moderated mediation analysis additionally shows that these effects are indeed mediated by the degree of self-expression elicited by the judgments.

One could argue that the findings may be due to participants in the private-judgment conditions simply not forming their assigned judgments, thus resulting in similar levels of enjoyment across judgment tasks in these conditions. To address this issue we analyzed the amount of time it took participants to recall their respective judgments after completing the main dependent measures. The results show that participants in the private-judgment conditions did not take any more time to recall their prior judgments than participants in the external-judgment conditions (F < 1). Furthermore, there was no interaction between type of judgment and judgment externalization (F < 1).

Simple-effects tests computed in the other direction show that participants who evaluated their likes and dislikes reported marginally more enjoyment when they were able to externalize these evaluations than when they were not able to do so  $(F(1, 1322) = 2.90, p < .09, \eta_p^2 = .002)$ . In contrast, participants asked to evaluate the casualness of the T-shirts did not find the task to be more enjoyable when they were able to externalize these judgments than when they made these judgments only privately (F(1, 1322) = 2.29, NS).

This suggests that *all* participants had formed a prior judgment, as instructed, thereby ruling out the possibility that the observed differences in task enjoyment across conditions were due to participants not performing their assigned judgments in the private-judgment conditions.

# STUDY 4: THE IMPORTANCE OF THE SELF IN THE EXPRESSION OF LIKES AND DISLIKES

Consistent with the results of study 2, study 3 showed that the phenomenon is contingent on external expression of one's evaluations, and that it is indeed mediated by a sense of self-expression. These results provide convergent evidence for a self-expression account of the phenomenon. However, while study 3 demonstrated that expression is indeed a critical factor in the phenomenon, it is still possible that it is not the expression of the self in particular that is critical but rather any expression of evaluations in general. The purpose of study 4 was therefore to show that it is the expression of one's own likes and dislikes—that is, the expression of the self in particular—that generates pleasure, not just expression of likes per se. In this study, all participants were asked to report likes and dislikes for a set of Tshirts. However, in one condition, participants were asked to indicate their own likes and dislikes for the T-shirts (as in the previous studies), whereas in the other condition, participants were asked to evaluate the same T-shirts based on the likes and dislikes of a close friend. Thus, participants in this latter condition also expressed evaluationbased judgments, but these judgments were not indicative of the participants' personal likes and dislikes and therefore were not expressive of the self. If assessing one's likes and dislikes is pleasurable in part because it enables people to self-express, then participants expressing their own likes should find the task significantly more pleasurable than would participants expressing the likes of a close friend.

# Method

One hundred MTurk participants (42.0% women) were randomly assigned to one of two conditions of a between-subjects design. In one condition, participants were asked to indicate whether they liked or disliked each item in a set of T-shirts. In the other condition, participants were asked to indicate whether a close friend of theirs would like or dislike the items in the same set of T-shirts.

All participants were first asked a series of background questions. In the evaluation-for-self condition, participants were asked to indicate their first name, gender, age, and place of birth. In the evaluation-for-other condition, participants were asked to "think of a particular close friend of [theirs]," to indicate the friend's name and age, and then briefly describe their relationship with this friend. Next, participants in the evaluation-for-self condition were asked

to assess whether they liked or disliked each member of the same set of 10 T-shirts as in study 2 on the same scale ("I dislike it"; "I like it"). Participants in the evaluation-for-other condition were asked to assess whether the specific friend that they had identified earlier would like or dislike each of these T-shirts ("[friend's name] would dislike it"; "[friend's name] would like it"). After reporting the 10 evaluations of the T-shirts, participants indicated their task enjoyment on the same pair of seven-point scales as in the previous studies ( $\alpha = .91$ ).

To control for the fact that participants would likely feel more knowledgeable about their own likes and dislikes than about assessing those of a friend, participants in the evaluation-for-self condition were asked to rate, "How well do you know your own preferences (e.g., what you like)?", whereas participants in the evaluation-for-other condition were asked to rate, "How well do you know [friend's name]'s preferences (e.g., what he/she likes)?" on a scale of 1 ("Not well at all") to 7 ("Very well"). Finally, participants were asked to report their task involvement ( $\alpha = .69$ ), T-shirt affinity ( $\alpha = .47$ ), and general browsing enjoyment ( $\alpha = .80$ ) on the same measures as in the prior studies.

## Results

Preliminary Analyses. There were no differences in terms of task involvement, general enjoyment of browsing, and general affinity toward T-shirts across conditions (all Fs < 1). However, participants in the evaluation-for-self condition reported knowing their own likes and dislikes better (M=6.34) than did participants who were asked about knowing the likes and dislikes of their friend in the evaluation-for-other condition (M=5.87; F(1, 98)=7.94, p < .01,  $\eta^2 = .075$ ), which is not surprising. As reported below, controlling for this difference in the analyses does not change the main results.

Task Enjoyment. As predicted, participants in the evaluation-for-self condition reported a higher level of task enjoyment (M = 6.35) than participants in the evaluationfor-other condition did (M = 5.77; F(1, 98) = 7.60, p <.01,  $\eta^2 = .072$ ). To control for the possibility that this effect could be due to differences in knowledge of likes and dislikes across conditions, participants' task enjoyment was submitted to an ANCOVA with knowledge of their own or friend's likes as a covariate. Even when we accounted for differences in liking knowledge, the effect of condition remained significant, with participants in the evaluation-for-self condition reporting a higher level of task enjoyment (LS-M=6.31) than participants in the evaluation-for-other condition did (LS-M = 5.81; F(1, 97)= 5.11, p < .03,  $\eta_p^2 = .050$ ). These results lend further support to a self-expression account of the phenomenon.

# Discussion

The results of study 4 show that when the type of judgment expressed is held constant (evaluation of likes and dislikes), it is evaluation that is conducted for *oneself* that is particularly pleasurable to report, rather than just any evaluation. This effect cannot be attributed to differences in task involvement, which was equivalent across conditions. This effect also cannot be attributed to differences in perceived knowledge about one's personal likes versus the likes of others, which was controlled for in our analyses.

# STUDY 5: THE SCOPE OF SELF-EXPRESSION INVOLVED IN THE EXTERNALIZATION OF ONE'S LIKES AND DISLIKES

The purpose of study 5 was to demonstrate that the expression of one's likes and dislikes cannot be reduced to just any form of self-expression. People's self-concepts are unique combinations of multiple identities (e.g., mother, professor, runner; Reed 2004). Research has shown that being identified along certain social categories, such as gender or race, tends to be perceived as especially threatening to or reductive of one's full identity (Dovidio et al. 2010; Fiske 2000). Therefore, framing liking and disliking judgments as a reflection of such category membership should logically decrease the pleasure of externalizing these evaluations by reducing the degree of self-expressiveness that the evaluations allow. In this study, in addition to manipulating the type of judgment (evaluation vs. control), we manipulated whether this judgment was rendered without any qualification (as in the other experiments) and hence as a possible expression of one's full self-identity, or rendered in relation to a social category that was potentially reductive of one's identity.

Two such categories were examined in this study. In one condition, participants—who were all adult males—were asked to evaluate the target products (T-shirts) "as a man," which was expected to be perceived as fairly reductive of their full identity because gender is a primary dimension along which people are stereotyped (Bem 1993; Eagly 1987).<sup>3</sup> Therefore, being restricted to evaluating T-shirts "as a man" should provide less opportunity for self-expression. In another condition, participants were asked to evaluate the T-shirts "as an adult," which was expected to be somewhat less reductive because, while being elderly often serves as a basis for stereotyping, being an adult rarely does (Kite et al. 2005). We predicted that the pleasure of expressing evaluations would be strongest among

participants who were not constrained to form their judgments in relation to a specified social category, and weakest among participants who were instructed to form their judgments "as a man." The effect among participants instructed to form their judgments "as an adult" was expected to fall somewhere in between.

# Method and Design

Six hundred fifty-four adult male participants recruited from MTurk were randomly assigned to the conditions of a 2 (type of judgment: evaluation vs. casualness)  $\times$  3 (identity: full identity vs. male identity vs. adult identity) between-subjects design. Participants who had taken part in a similar study before were excluded from the analyses, leaving a total of 599 usable responses.

Participants were presented with the same set of 10 Tshirts as in previous studies and were asked to indicate whether they liked or disliked them, or whether the T-shirts were more or less casual. In the full-identity conditions, participants were asked to make these judgments without any further instruction (as in our typical paradigm). In the male-identity conditions, participants assigned to report their likes and dislikes were asked, "As a male, do you like or dislike this T-shirt?", while those assigned to report casualness judgments were asked, "As a male, is this T-shirt less casual or more casual?" In the adult-identity conditions, participants assigned to indicate their likes and dislikes were asked, "As an adult, do you like or dislike this T-shirt?", and those assigned to report casualness judgments were asked, "As an adult, is this T-shirt less casual or more casual?"

After participants had judged all 10 T-shirts, they reported how much they enjoyed the task ( $\alpha=.92$ ), their task involvement ( $\alpha=.89$ ), T-shirt affinity ( $\alpha=.54$ ), and general browsing enjoyment ( $\alpha=.77$ ) on the same measures as in prior studies. In addition, the same item was used as in prior studies to measure the degree of self-expressiveness elicited by the tasks.

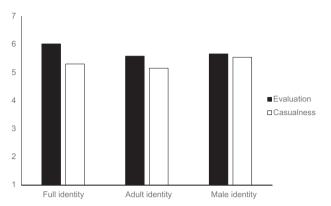
#### Results

Preliminary Analyses. As in the previous studies, there were no differences in general browsing and shopping enjoyment or in general affinity toward T-shirts across conditions (largest F(1, 593) = 1.20, NS). A main effect of type of judgment on task involvement indicated that participants were slightly more involved in the evaluation condition than in the casualness condition (F(1, 593) = 4.73, p < .03,  $\eta^2 = .009$ ,  $\eta_p^2 = .009$ ). However, this effect did not interact with the identity factor (F(2, 593) = 1.65, NS), and additional analyses showed that the main results reported below still hold after we controlled for differences in task involvement.

We elected to exclusively recruit male participants because prior research has shown that women tend to experience feelings of anxiety and threat when their gender identity is primed (Eliezer, Major, and Mendes 2010), which could potentially distort observed levels of task enjoyment.

#### FIGURE 1

STUDY 5: TASK ENJOYMENT AS A FUNCTION OF VARYING DEGREES OF SELF-EXPRESSION AND TYPE OF JUDGMENT



Task Enjoyment. A  $3 \times 2$  ANOVA of participants' reported task enjoyment revealed an expected main effect of type of judgment, showing that as in the previous studies, participants who reported their likes and dislikes enjoyed the task more (M = 5.76) than did those who indicated whether the T-shirts were more or less casual  $(M = 5.33; F(1, 593) = 17.00, p < .001, \eta^2 = .027, \eta_p^2 =$ .028; see figure 1). There was also a main effect of identity, showing somewhat greater task enjoyment in the fullidentity (M = 5.66) and male-identity (M = 5.61) conditions than in the adult-identity condition (M = 5.37; F(2, $593) = 3.05, p < .05, \eta^2 = .010, \eta_p^2 = .010$ ). More importantly, there was a marginally significant interaction between type of judgment and identity (F(2, 593) = 2.78, p)= .06,  $\eta^2$  = .009,  $\eta_p^2$  = .009). Simple effects show that within the full-identity condition, participants expressing their likes and dislikes of the T-shirts enjoyed the task significantly more (M = 6.02) than did participants indicating whether the T-shirts were casual (M = 5.31; F(1, 593) =15.29, p < .001,  $\eta_p^2 = .025$ ; see table 3). In contrast, within the male-identity condition this effect was not significant ( $M_{\text{Evaluation}} = 5.67 \text{ vs. } M_{\text{Casualness}} = 5.55; F < 1$ ). As expected, the effect in the adult-identity condition fell somewhere in between the other two identity conditions  $(M_{\text{Evaluation}} = 5.59 \text{ vs. } M_{\text{Casualness}} = 5.16; F(1, 593) = 6.37,$  $p = .012, \, \eta_p^2 = .011).$  Interaction contrasts show that the effect of type of judgment was indeed stronger in the fullidentity condition than in the male-identity condition (F(1,593) = 5.52, p = .019,  $\eta_p^2 = .009$ ), but not significantly greater in the full-identity condition than in the adultidentity condition  $(F(1, 593) = 1.18, p = .28, \eta_p^2 = .002)$ . Overall, these results suggest that the pleasure of expressing our likes and dislikes is contingent on the degree to which one's full identity can be expressed through the evaluation.

Moderated Mediation Analysis. To test whether observed differences in task enjoyment across conditions were indeed due to differences in perceived selfexpression, we conducted a moderated mediation analysis of the observed interaction between type of judgment and full versus male identity, using model 7 of the PROCESS macro with 5,000 bootstrapped samples (Hayes 2018). The results indeed indicate significant moderated mediation (B=.140, with a bias-corrected 95% confidence interval)that does not include 0 [.038, .264]). Within the fullidentity condition, task enjoyment was significantly mediated by perceived self-expression (B= .194, confidence interval [.114, .294]), whereas in the male-identity condition it was not (B = .054, confidence interval [-.019, .135]).The same analysis conducted for the full- versus adultidentity contrast revealed a similar pattern of results, showing a significant moderated mediation (B= .114, with a bias-corrected 95% confidence interval that does not include 0 [.007, .243]). Again, within the full-identity condition, task enjoyment was significantly mediated by perceived self-expression (B= .188, confidence interval [.108, .283]), whereas in the adult-identity condition it was not (B=.073, confidence interval [-.075, .159]).

#### Discussion

The results of this study lend further support for the proposition that the phenomenon is driven by a sense of self-expressiveness. Two sets of results support this proposition. First, as predicted, the heightened pleasure of reporting one's evaluations relative to the control judgment was stronger when participants were allowed to express themselves without constraint than when they were restricted to assessing the products in relation to a narrower, male identity. Second, a moderated mediation analysis shows that these effects are indeed mediated by the perceived degree of self-expression elicited by the judgments.

In addition, the results help refine our understanding of the kind of self-expression involved in the phenomenon. The self-expressiveness afforded by the assessment and reporting of one's likes and dislikes appears to refer to one's global self-identity rather than a narrower selfidentity.

# STUDY 6: CAN THERE ALSO BE PLEASURE FROM EXPRESSING ONE'S DISLIKES?

In the marketplace, consumers encounter not just things that are likable but also things that are not likable (e.g., distasteful reality TV stars). This raises the question of whether the pleasure of assessing and expressing one's evaluations is specific to things that people generally like, or whether it extends to objects that are *not* well liked. To

TABLE 3

STUDY 5: MEANS AS A FUNCTION OF VARYING DEGREES OF SELF-EXPRESSION AND TYPE OF JUDGMENT

	Study 5					
	Full identity		Adult identity		Male identity	
	Evaluation (n=94)	Casualness (n = 95)	Evaluation (n=108)	Casualness (n=100)	Evaluation (n=100)	Casualness (n=102)
Enjoyment	6.02	5.31	5.59	5.16	5.67	5.55
Expressiveness	5.38	4.29	4.94	4.51	4.99	4.69
Time	52.14 s	57.69 s	58.16 s	52.07 s	69.67 s	53.78 s
Involvement	6.37	6.35	6.41	6.04	6.28	6.42
Browsing enjoyment	5.02	4.60	4.98	4.83	4.61	5.13

examine this issue, we again asked participants to report evaluation-based or non-evaluation-based judgments of a series of T-shirts. Unlike in the previous studies, in addition to varying the type of judgments that participants made, we manipulated whether the T-shirts to be judged were appealing or unappealing. If the basic effect observed in the previous studies replicates for the appealing T-shirts but not for the unappealing T-shirts, one would infer that there is inherent pleasure in expressing what we like but not what we dislike. In contrast, if the effect replicates for both the appealing and unappealing T-shirts, one would infer that there is inherent pleasure in assessing and expressing both what we like and what we dislike.

## Method

Pretest. In order to construct two sets of T-shirts that vary in terms of average appeal, a broader set of 30 T-shirts was selected from the same retail website as the one from which we selected the original set of 10 T-shirts. We used the same selection criteria as in the previous studies (unisex, graphic-dominated, broad range of colors, etc.). The 30 T-shirts were then presented in a randomized order to 52 participants from the MTurk panel who were asked to rate how much they liked each T-shirt on a five-point scale (1 = ``I strongly dislike it''; 5 = ``I strongly like it''). The10 T-shirts that received the highest mean rating across participants were selected to form the appealing set (mean rating = 3.42 out of 5), and the 10 T-shirts that received the lowest mean rating across participants were selected to form the unappealing set (mean rating = 2.55 out of 5; rating difference across sets: F(1, 18) = 59.05, p < .001, $\eta^2 = .766$ ).

Main Study. One thousand twenty-seven MTurk participants (52.6% women) were randomly assigned to the conditions of a 2 (type of judgment: evaluation vs. control)  $\times$  2 (T-shirt appeal: appealing vs. unappealing) between-subjects design. Participants were asked to indicate whether they liked or disliked each of  $10\,\text{T}$ -shirts (on a five-point scale), or whether each T-shirt was more or less

colorful (also on a five-point scale). Participants were randomly assigned to form these judgments either for the 10 T-shirts that the pretest had revealed to be appealing or for the 10 T-shirts that the pretest had revealed to be unappealing. (The presentation sequence of the T-shirts was randomized across participants.) After participants had judged all 10 T-shirts, they were asked to report their task enjoyment on the same measures as in the previous studies ( $\alpha = .92$ ). They were then asked to indicate their perceived level of self-expression on the same item as in the prior studies. Finally, they reported their task involvement ( $\alpha = .85$ ), T-shirt affinity ( $\alpha = .50$ ), and general browsing enjoyment ( $\alpha = .79$ ) on the same measures as in the prior studies.

#### Results

*Preliminary Analyses*. Analyses similar to those in the prior studies again revealed no differences in involvement, T-shirt affinity, and general enjoyment of browsing and shopping across conditions (all Fs < 1).

Task Enjoyment. A  $2 \times 2$  ANOVA of participants' reported enjoyment of the task revealed a main effect of type of judgment ( $F(1, 1023) = 12.68, p < .01, \eta^2 = .012$ ,  $\eta_p^2 = .012$ ). Once again, participants who indicated whether they liked or disliked the T-shirts enjoyed the task more (M = 5.88) than did participants who reported their non-evaluation-based judgments of the same set of T-shirts (M = 5.61). There was also a main effect of appeal on task enjoyment, such that participants who judged appealing Tshirts (M = 5.83) reported greater enjoyment than those who judged unappealing T-shirts (M = 5.66, F(1, 1023) = $5.44, p = .02, \eta^2 = .005, \eta_p^2 = .005$ ). Importantly, however, there was no interaction with the appeal of the Tshirts (F = 1.04, NS). As reported in table 4, participants derived greater enjoyment from reporting their likes and dislikes of the T-shirts (compared to their judgments of colorfulness) both in the appealing-T-shirt condition  $(M_{\rm Evaluation} = 5.93 \text{ vs. } M_{\rm Colorfulness} = 5.74; F(1, 1023) = 3.24, p = .07, n_{\rm p}^2 = .003)$ , albeit marginally, and in the

TABLE 4
STUDY 6: MEANS AS A FUNCTION OF T-SHIRT APPEAL AND
TYPE OF JUDGMENT

	Study 6			
	Appeali	ng T-shirts	Unappealing T-shirts	
	Evaluation (n=259)	Colorfulness (n=257)	Evaluation (n=247)	Colorfulness (n=264)
Enjoyment	5.93	5.74	5.83	5.48
Expressiveness	5.44	4.83	5.39	4.68
Time	69.66 s	67.29 s	66.68 s	59.46 s
Involvement	6.47	6.41	6.56	6.38
Browsing enjoyment	5.54	5.41	5.61	5.45

unappealing-T-shirt condition ( $M_{\rm Evaluation} = 5.83$  vs.  $M_{\rm Colorfulness} = 5.48$ ; F(1, 1023) = 10.44, p = .001,  $\eta_{\rm p}^2 = .010$ ). In other words, the greater pleasure of expressing one's evaluations was not contingent on the average appeal of the products to be evaluated. This pattern of results is also robust: as with the results of studies 2 and 3, it was replicated across two independent samples of participants (see the web appendix).

Mediation Analysis. A 2 × 2 ANOVA of perceived self-expression revealed a main effect of type of judgment  $(F(1, 1023) = 45.56, p < .01, \eta^2 = .043, \eta_p^2 = .043).$ Participants who indicated whether they liked or disliked the T-shirts reported a greater sense of self-expression (M = 5.42) than did participants who indicated whether the T-shirts were more or less colorful (M = 4.75). This effect was not qualified by an interaction with appeal (F < 1). (There was also no main effect of appeal [F < 1].) To test whether the observed differences in task enjoyment across types of judgment were indeed driven by differences in perceived self-expression, we conducted a mediation analysis using model 4 of the PROCESS macro with 5,000 bootstrapped samples (Hayes 2018). The results again confirm that task enjoyment was significantly mediated by perceived self-expression (B = .122, confidence interval [.087, .162]). Finally, as expected, an analysis using model 7 of the PROCESS macro found no evidence for a moderated mediation between type of judgment and appeal (B =-.019, with a bias-corrected 95% confidence interval that included 0 [-.090, .52]).

# Discussion

The results of study 6 again demonstrate that people derive more pleasure from assessing and expressing their likes and dislikes than from assessing and expressing comparable, non-evaluation-based judgments. The results provide further evidence that the phenomenon is driven by the

heightened sense of self-expressiveness afforded by externalizing one's likes and dislikes.

More importantly, the results show that the phenomenon is not specific to products that are appealing: it extends to products that are unappealing, suggesting that there is also inherent pleasure in expressing what one dislikes. This proposition is corroborated by an additional analysis that leverages the data across studies. Across our studies (except study 1)—including the seven replication studies reported in the web appendix—more than 1,500 participants made binary like/dislike evaluations of sets of 10 items (T-shirts or cars). Understandably, within each set, some items were liked and some were disliked. Across these participants, the correlation between the number of items liked (vs. disliked) and the overall enjoyment of the evaluation task was r = .29 (p < .001). Although this correlation is significant, it is rather modest, accounting for less than 9% of the total variance in enjoyment. The modesty of this correlation was due in part to a nontrivial number of participants who reported enjoying the task very much even though they disliked most of the stimuli that they evaluated. To illustrate, of the 177 participants who disliked eight or more of the 10 items, 110 (62.15%) rated their enjoyment of the task as 6 or more on a seven-point scale. Taken together, the results of study 6 and this analysis suggest that there can be pleasure in expressing not just one's likes, but also one's dislikes.

# STUDY 7: COMPARING THE EXPRESSION OF ONE'S LIKES AND DISLIKES TO OTHER SELF-RELATED JUDGMENTS

The previous studies consistently showed that the pleasure of indicating one's likes and dislikes arises in part from the self-expressiveness of evaluative judgments. An interesting theoretical question is whether there is something special about the form of self-expression involved in externalizing one's likes and dislikes. In other words, would the externalization of any judgment related to oneself produce similar effects? The purpose of this final study was therefore to examine how the pleasure of expressing one's likes compares to the expression of other judgments that are also related to the self. Because such a comparison necessarily entails calibration of the comparison task, we first conducted a pretest to identify a set of self-relevant judgments that were rated as either superficially selfexpressive, such as fact-based questions about oneself (e.g., "Did you go to a public or private high school?"), or deeply expressive of the self, such as certain personalityrelated questions (e.g., "Are you an extrovert or introvert?"). Based on this pretest, we constructed two sets of self-relevant judgments that differed in depth of selfexpressiveness to serve as benchmarks in the main study. Comparing the pleasure derived from the expression of one's likes and dislikes to the pleasure elicited by the expression of these alternative sets of self-relevant judgments offers some insight into the depth of self-expression afforded by evaluation. Finally, as in the prior studies, we again tested whether differences in enjoyment were driven by differences in self-expressiveness.

## Method

Pretest. In order to create two sets of judgments that vary along degrees of self-expressiveness, we constructed a broad set of 36 judgments, chosen to be related to the self but to be either superficially (e.g., "Where did you grow up?") or deeply (e.g., "Are you a realist or an idealist?") self-expressive. In the pretest 98 participants from the MTurk panel were randomly assigned to one of two subsets of 18 judgments. For each of these judgments, they were asked to give two responses. First, they provided their response to the judgment itself (e.g., by answering "realist" or "idealist"); second, they were asked to rate the selfexpressiveness of the assessment by indicating, "To what extent does your response [to the question "Are you a realist or an idealist?"] say something about who you are as a person?" on a seven-point scale (1 = ``Not at all'' to 7 = ``Not at all'')"Very much so"). The 10 judgments that received the highest ratings of self-expressiveness across participants were selected to form the "deep self-expression" set (mean rating = 4.81 out of 7), and the 10 judgments that received the lowest ratings across participants were selected to form the "surface self-expression" set (mean rating = 3.47 out of 7; rating difference across sets F(1, 18) = 33.55, p < $.001, \eta^2 = .651$ ).

Main Study. Five hundred forty-four MTurk participants (48.4% women) were randomly assigned to one of three between-subjects conditions: (a) evaluation, (b) deep self-expression, or (c) surface self-expression. Participants in the evaluation condition were asked to indicate whether they liked or disliked each of 10 cars (i.e., "Do you like or dislike this car?"). Participants in one of the two control conditions were asked to indicate their responses to the 10 self-relevant assessments that were pretested to be deeply self-expressive (e.g., "Are you an extrovert or introvert?"; "Would you rather have a son or a daughter?"), whereas participants in the other control condition were asked to indicate their responses to the 10 self-relevant statements that were pretested to be more superficially self-expressive (e.g., "Did you go to a public or private high school?"; "How many siblings do you have?"). After participants responded to all 10 items, they were asked to report their task enjoyment on the same measures as in the previous studies ( $\alpha = .93$ ). They were then asked to respond to the same measure of self-expressiveness as in the prior studies.

Finally, participants reported their task involvement on the same measures as in the prior studies ( $\alpha = .90$ ).

# Results

There were significant differences in task enjoyment across conditions  $(F(2, 541) = 28.89, p < .001, \eta^2 = .092;$ see table 5). Planned contrasts show that participants who made more deeply self-expressive statements reported greater task enjoyment (M = 5.29) than those who made more superficially self-expressive statements (M = 4.87;  $F(1, 541) = 8.52, p = .004, \eta_p^2 = .009$ ; see table 5). This first result reveals that pleasure increases with the depth of self-expression. More importantly, participants who expressed their likes and dislikes reported significantly greater enjoyment (M = 5.92) than those who made superficially self-expressive statements (F(1, 541) = 56.77, p <.001,  $\eta_{D}^{2} = .088$ ). In fact, the level of task enjoyment in the evaluation condition was higher than the enjoyment reported in the deep-self-expression condition (F(1, 541) = $20.35, p < .001, \eta_{p}^{2} = .044$ ). A replication study reported in the web appendix confirms that these results are robust across an independent sample of participants.

Mediation Analysis. As expected, an ANOVA revealed significant differences in perceived self-expression across conditions  $(F(2, 541) = 8.40, p < .001, \eta^2 = .030)$ . Participants in the evaluation condition reported similar levels of self-expression as those in the deep-selfexpression condition ( $M_{\text{Evaluation}} = 5.42 \text{ vs. } M_{\text{Deep}} = 5.52,$ F < 1), and greater self-expression than those in the surface-self-expression condition ( $M_{\text{Surface}} = 4.93$ ; F(1,541) = 10.25, p = .001,  $\eta_p^2 = .019$ ). To test whether perceived self-expression mediated the difference in task enjoyment between the evaluation condition and the surfaceself-expression condition, we conducted a mediation analysis using model 4 of the PROCESS macro with 5,000 bootstrapped samples (Hayes 2018). The results again confirm that task enjoyment was significantly mediated by perceived self-expression (B = .136, confidence interval [.047, .230]). Given that the evaluation and deep-selfexpression conditions elicited comparable levels of self-expressiveness, we next conducted a similar mediation analysis in which we pooled the evaluation and deep-selfexpression conditions and compared them to the surfaceself-expression condition. Again, perceived self-expression was found to mediate the effect on task enjoyment (B = .154, confidence interval [.073, .247]).

## Discussion

The results show with a different paradigm that relative to other tasks, there is something distinctively pleasurable in assessing and expressing one's likes and dislikes. More importantly, the results of study 7 offer preliminary insights on whether there is a unique type of

TABLE 5
STUDY 7: MEANS AS A FUNCTION OF TYPE OF JUDGMENT

	Study 7		
	Surface self- expression (n=180)	Evaluation (n=190)	Deep self- expression (n=174)
Enjoyment	4.87	5.92	5.29
Expressiveness	4.93	5.42	5.52
Time	35.23 s	44.57 s	42.24 s
Involvement	6.64	6.58	6.71

self-expression implicated in the phenomenon, suggesting that the pleasure of expressing one's likes and dislikes is more akin to the pleasure of externalizing assessments that are deeply self-expressive than those that are more superficially self-expressive. Specifically, expressing evaluations appears to elicit greater pleasure than both shallower and deeper forms of self-expression. Conceptually, these results converge with those of study 5, which indicated that it is one's full self-identity that seems to be expressed through the reporting of one's likes and dislikes, rather than a narrower self-identity.

One should recognize, however, that these results are bound by the specific calibration of the study's parameters (e.g., number of judgments across conditions, type of product to be evaluated, choice of comparison statements). This caveat notwithstanding, the results do show that not all self-relevant judgments will produce the type of pleasure elicited by the expression of one's likes and dislikes.

#### GENERAL DISCUSSION

Although standard consumer behavior theory conceptualizes evaluations as instrumental to subsequent decisions, in reality consumers often render evaluations when no decision is at stake. This raises the question of why consumers appear to be so eager to evaluate things when there is no ostensible reason to do so. In this article we advance the thesis that consumers derive an inherent pleasure from assessing and expressing their evaluations of various things that they encounter in the marketplace (e.g., products, ads, celebrities, social media content). In accord with this general thesis, results from seven studies consistently show that people find the assessment and expression of their likes and dislikes to be particularly enjoyable compared to a variety of non-evaluation-based control judgments about the same stimuli. This finding surfaced across three different methodological paradigms (study 1 vs. studies 2-6 vs. study 7) and four sets of stimuli (study 1 vs. studies 2–5 vs. study 6 vs. study 7). In fact, consumers even appear to derive pleasure from expressing what they dislike (study 6).

On the surface, the finding that people consider the expression of their evaluations to be fairly pleasurable may seem inconsistent with the finding that the act of making a choice can be demotivating and depleting (Iyengar and Lepper 2000; Vohs et al. 2014). However, the inconsistency is only superficial. Our research focuses on evaluations that are *not* instrumental to decisions and choices, and therefore need not be depleting, whereas research on choice-based depletion focuses only on evaluations that are instrumental to choice.

Given that most of our findings rest on a comparison between participants' enjoyment of assessing and expressing their likes and dislikes relative to the enjoyment of making and expressing various control judgments, one may wonder whether the findings could be driven by some peculiarity of the various control judgments. For example, one could argue that the reason why expressing one's liking or disliking of T-shirts appeared more pleasurable than indicating the colorfulness of the same T-shirts is that the former type of judgment is more abstract and configural than the latter, which focuses on a specific attribute of the product. It is for this very reason that in our studies we used a variety of control judgments that varied in their degree of abstractness and configurality. We found similar results when the control judgment was attribute-specific (colorfulness) and when it was more abstract and configural (match), or somewhere in between (casualness). One could also argue that the observed differences in task enjoyment between evaluation and the various control judgments may have been driven by differences in involvement across types of judgment. However, in all our studies, the level of task involvement was similar for the evaluation-based judgments and the non-evaluation-based judgments.

Finally, one could argue that the findings may have been driven by a greater difficulty and lower fluency of the control judgments relative to the evaluation-based judgment. This alternative explanation seems unlikely for at least three reasons. First, in our studies, if anything, the evaluation task took somewhat longer than the various control tasks, which suggests that the main findings were not driven by the evaluation task being easier (Hick 1952). Second, as reported in study 2, a post-test showed no difference in perceived difficulty between the evaluation task and the various control tasks. Third, one should keep in mind that in some of our studies (studies 3, 4, and 5), predicted differences in task enjoyment were found even when the type of judgment (evaluation) was held constant.

Although our findings do not seem to be a mere artifact of our methodology, some limitations of our studies need to be acknowledged. First, except for study 1, which was conducted in a lab setting among college students, all the studies relied on participants from the MTurk panel. Second, all studies involved relatively simple stimuli (pictures of T-shirts, other clothing items, and cars). Third, in all studies the main dependent measure was based on

self-reports. It would be useful to extend our research (a) with participants who are more representative of the general consumer population, (b) with stimuli that are richer and more complex (e.g., technological products), and (c) with more behavioral measures, or possibly physiological measures, of task enjoyment.

# Why Is Assessing and Expressing Our Likes and Dislikes Inherently Pleasurable?

The present findings support our proposition that a major explanation for the pleasure that consumers derived from evaluating things lies in the notion that assessing and indicating one's likes and dislikes allows individuals to affirm their identities—that is, to self-express—which previous research has shown to be inherently pleasurable and motivating (Tamir and Mitchell 2012). Consistent with this explanation, study 3 shows that the phenomenon is contingent on the opportunity to externalize one's evaluations, implying that expression is a critical component of the underlying process. Moreover, study 4 shows that it is the expression of one's personal evaluations in particular, rather than the expression of evaluations in general, that is pleasurable. Study 5 shows that this effect is attenuated when the ability to express one's full identity is restricted. Furthermore, studies 2, 3, 5, 6, and 7 show that the effect is mediated by the perceived selfexpressiveness of the judgment.

An interesting theoretical question is whether there is something special or unique in the self-expression-related pleasure that consumers derive from indicating their likes and dislikes, or whether any form of self-expression would produce similar effects. While the self-expression involved in evaluation need not be totally unique, our results suggest that this pleasure is not reducible to just any type of self-expression. Study 5's results show that the self-expression enabled by externalizing evaluations seems to draw on a more global (vs. narrow) sense of personal identity. Relatedly, study 7's results suggest that the pleasure of expressing one's evaluations is more akin to the pleasure of deep forms of self-expression than to that of more superficial forms of self-expression.

Although outside the scope of the present work, we believe that another, complementary mechanism may also contribute to a pleasure of evaluation that is independent of self-expression. Specifically, people may enjoy evaluating their likes and dislikes because doing so provides a heightened sense of self-discovery (Atkinson 1964; Baumeister 1998; McClelland et al. 1953; Sedikides and Strube 1997; Trope 1975; Trope 1980). The process is akin to the pleasure that people experience from reading their horoscope or completing various personality tests (Baumeister 1998). Consistent with this speculation, in a pair of studies not reported here, we indeed found that, when we held the externalization of the judgment constant, participants experienced greater pleasure from evaluation when their sense of

learning from their judgments was higher. This potential second mechanism should be especially true for novel objects for which consumers do not have well-formed evaluations, whereas the self-expression mechanism documented in the present research is more likely with evaluation objects that are more familiar. We believe this issue merits further exploration.

# The Pleasure of Assessing and Expressing Our Likes and Dislikes in the Real World

While our controlled experiments naturally restricted the range of possible explanations for the phenomenon documented in this article, it is likely that outside the confines of the lab, other mechanisms also contribute to consumers' pleasure in expressing their evaluations. 4 First, even if consumers do not have an actual choice to make, they still may derive some instrumental value from expressing their likes and dislikes in the marketplace. For example, sharing with others that one likes or dislikes a particular product or brand helps inform potential gift-givers of one's preferences and tastes. Sharing one's likes and dislikes online can also provide useful feedback to marketers and other customers and augment suggestions by recommendation systems. More symbolically, assessing, and possibly communicating, one's likes and dislikes may help people determine their preference compatibility with others (e.g., "Can I really be friends with him/her?"). Furthermore, the sharing of likes and dislikes may foster a sense of intimacy between people. Relatedly, given that in all our studies participants were not told that their evaluations would be viewed by others, future research could examine whether the pleasure derived from evaluation is contingent on the particular audience who might be viewing these assessments (e.g., members of one's ingroup vs. outgroup).

Although unlikely to be at work within our studies, these additional mechanisms may further account for consumers' eagerness to evaluate things in the real world. Studying these additional mechanisms may require a broadening of the measures of enjoyment beyond those used in our studies. Whereas in our studies we measured how much participants enjoyed the task and felt that "it was fun," it is possible that other enjoyment measures, such as "it was helpful" and "it was insightful," could capture some of these additional mechanisms.

# Substantive Implications for Marketers and Policy Makers

We believe that our findings not only are important theoretically but also have significant and substantive implications for marketers and policy makers. Our findings

<sup>4</sup> We thank an anonymous reviewer for suggesting these additional potential mechanisms.

identify a previously unrecognized source of value in the marketplace, one that is conceptually independent of the products and services that are being offered. When products, services, and other marketplace offerings are made available for consideration, they provide value not just when they are purchased and consumed—as is assumed in standard marketing and economic theory—but also whenever consumers have the opportunity to assess and express their evaluations of them. This added source of value may exist even if the evaluation itself is negative. Recognizing this additional hedonic benefit has a variety of practical implications.

Most online retailers, small and large (e.g., Amazon, Target, Walmart), allow consumers to provide feedback on their products. These systems are typically designed to capture product feedback from consumers *after* they have purchased and tried the products. It is rarer for consumers to be invited or encouraged to evaluate the products *before* or *in absence of* having made a purchase. Our results suggest, however, that retailers could enhance consumers' overall experience with their online retail sites by encouraging consumers to express their product evaluations not only after a purchase but also when they are merely browsing or exploring the offerings.

Future research could test this potential implication of our findings through field experimentation by examining whether providing the ability to express one's evaluations through a simple "like/dislike" button while browsing an online retail website indeed enhances overall consumer engagement. A similar idea can be applied in the brick-and-mortar world. For instance, instead of surveying consumers only after they have made a purchase, brick-and-mortar retailers could encourage shoppers to express their likes and dislikes as they browse through the various offerings (e.g., by giving out simple scoring sheets to be completed in the store).

Our findings also have implications for increasing the response rate to customer evaluation surveys, suggesting that framing survey responses as a means of self-expression should increase consumers' motivation to provide such responses. For example, the travel website TripAdvisor commonly asks travelers to evaluate places they have visited with the following request: "Have you been to [X and Z]? Travelers want to see more reviews of these places." We speculate that reframing this request in terms of self-expression (e.g., "Tell others how YOU feel about these places") may be more effective.

Finally, our results help clarify an otherwise puzzling aspect of today's marketplace. Celebrities who are immensely disliked among vast segments of the population, such as Kim Kardashian, are nonetheless incredibly effective in terms of their ability to attract audiences, and as a result, are enormously successful financially. This paradox may arise in part because people take pleasure not just in expressing their likes but also in expressing their dislikes,

as evidenced by study 6. An informal perusal of a typical online article or post about Kim Kardashian will reveal a very large number of readers' comments, the majority of which are often quite negative. Yet, in terms of traffic building and audience engagement, there is little doubt that such content is very effective. This realization opens the door to innovative business models that revolve around the monetization of consumers' dislikes.

To conclude, we need to realize that consumers do not just evaluate things in order to make choices and other decisions. They evaluate all the time. They do so in part because there is pleasure in assessing and expressing one's likes and dislikes.

## DATA COLLECTION INFORMATION

The first two authors jointly managed the data collection for all 14 studies (studies 1 through 7 and seven replication studies reported in the web appendix) using the Amazon Mechanical Turk panel (studies 2–7) and Columbia University Behavioral Lab participant pool (study 1) from fall 2011 through spring 2018. These data were analyzed jointly by the first two authors.

#### REFERENCES

Ainslie, George (1975), "Specious Reward: A Behavioral Theory of Impulsiveness and Impulse Control," *Psychological Bulletin*, 82 (4), 463–96.

Alderson, Wroe (1957), Marketing Behavior and Executive Action, Homewood, IL: Irwin.

Atkinson, John W. (1964), An Introduction to Motivation, Oxford, UK: Van Nostrand.

Aula, Anne, Rehan M. Khan, and Zhiwei Guan (2010), "How Does Search Behavior Change As Search Becomes More Difficult?" in *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, ed. Elizabeth Mynatt, Geraldine Fitzpatrick, Scott Hudson, Keith Edwards, and Tom Rodden, New York: Association for Computer Machinery, 35–44.

Baumeister, Roy F. (1998), "The Self," in *The Handbook of Social Psychology*, 4th edition, ed. Daniel T. Gilbert, Susan T. Fiske, and Gardner Lindzey, New York: McGraw-Hill, 680–740.

Belk, Russell W. (1988), "Possessions and the Extended Self," *Journal of Consumer Research*, 15 (2), 139–68.

Bem, Sandra Lipsitz (1993), *The Lenses of Gender*, New Haven, CT: Yale University Press.

Brakus, J. Joško, Bernd H. Schmitt, and Lia Zarantonello (2009), "Brand Experience: What Is It? How Is It Measured? Does It Affect Loyalty?" *Journal of Marketing*, 73 (3), 52–68.

Chernev, Alexander, Ryan Hamilton, and David Gal (2011), "Competing for Consumer Identity: Limits to Self-Expression and the Perils of Lifestyle Branding," *Journal of Marketing*, 75 (3), 66–82.

Dovidio, John F., Miles Hewstone, Peter Glick, and Victoria M. Esses (2010), "Prejudice, Stereotyping and Discrimination: Theoretical and Empirical Overview," in *The SAGE Handbook of Prejudice, Stereotyping and Discrimination*, ed.

- John F. Dovidio, Miles Hewstone, Peter Glick, and Victoria M. Esses, Thousand Oaks, CA: Sage, 3–29.
- Dunning, David (2005), Self-Insight: Roadblocks and Detours on the Path to Knowing Thyself, New York: Psychology Press.
- Eagly, Alice H. (1987), Sex Differences in Social Behavior: A Social-Role Interpretation, Hillsdale, NJ: Erlbaum.
- Eliezer, Dina, Brenda Major, and Wendy Berry Mendes (2010), "The Costs of Caring: Gender Identification Increases Threat Following Exposure to Sexism," *Journal of Experimental Social Psychology*, 46 (1), 159–65.
- Engel, James F., David T. Kollat, and Roger D. Blackwell (1968), Consumer Behavior, New York: Holt, Rinehart and Winston.
- Fishbein, Martin and Icek Azjen (1975), Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research, Reading, MA: Addison-Wesley.
- Fiske, Susan T. (2000), "Stereotyping, Prejudice, and Discrimination at the Seam between the Centuries: Evolution, Culture, Mind, and Brain," *European Journal of Social Psychology*, 30 (3), 299–322.
- Gollwitzer, Peter M. and Oliver Kirchhof (1998), "The Willful Pursuit of Identity," in *Motivation and Self-Regulation Across the Life Span*, ed. Jutta Heckhausen and Carol S. Dweck, New York: Cambridge University Press, 389–423.
- Hayes, Andrew F. (2018), Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach, 2nd ed., New York: Guilford.
- Herrnstein, Richard J.and Drazen Prelec (1997), "A Theory of Addiction," in *The Matching Law*, ed. Howard Rachling and David I. Laibson, Cambridge, MA: Harvard University Press, 160–87.
- Hick, William E. (1952), "On the Rate of Gain of Information," Quarterly Journal of Experimental Psychology, 4 (1), 11–26.
- Hoch, Stephen J. and George F. Loewenstein (1991), "Time-Inconsistent Preferences and Consumer Self-Control," *Journal of Consumer Research*, 17 (4), 492–507.
- Holbrook, Morris B. (1992), "Patterns, Personalities, and Complex Relationships in the Effects of Self on Mundane Everyday Consumption: These Are 495 of My Most and Least Favorite Things," in NA–Advances in Consumer Research, Vol. 19, ed. John F. Sherry Jr.and Brian Sternthal, Provo, UT: Association for Consumer Research, 417–23.
- Holbrook, Morris B. and Elizabeth C. Hirschman (1982), "The Experiential Aspects of Consumption: Consumer Fantasies, Feelings, and Fun," *Journal of Consumer Research*, 9 (2), 132–40.
- Howard, John A. and Jagdish N. Sheth (1969), *The Theory of Buyer Behavior*, New York: John Wiley & Sons.
- Hoyer, Wayne, Deborah J. MacInnis, and Rik Pieters (2016), *Consumer Behavior*, 6th edition, Mason, OH: South-Western, Cengage Learning.
- Huber, Joel, John W. Payne, and Christopher Puto (1982), "Adding Asymmetrically Dominated Alternatives: Violations of Regularity and the Similarity Hypothesis," *Journal of Consumer Research*, 9 (1), 90–8.
- Iyengar, Sheena S. and Mark R. Lepper (2000), "When Choice Is Demotivating: Can One Desire Too Much of a Good Thing?" Journal of Personality and Social Psychology, 79 (6), 995–1006.
- Katz, Daniel (1960), "The Functional Approach to the Study of Attitudes," *Public Opinion Quarterly*, 24 (2), 163–204.
- Kim, Heejung S. and Deborah Ko (2007), "Culture and Self-Expression," in *Frontiers of Social Psychology: The Self*, ed.

- Constantine Sedikides and Steven J. Spencer, New York: Psychology Press, 325–42.
- Kim, Heejung S. and David K. Sherman (2007), "Express Yourself': Culture and the Effect of Self-Expression on Choice," *Journal of Personality and Social Psychology*, 92 (1), 1–11.
- Kim, Jeonghyun (2006), "Task Difficulty as a Predictor and Indicator of Web Searching Interaction," in *CHI'06: Extended Abstracts on Human Factors in Computing Systems*, ed. Gary Olson and Robin Jeffries, New York: Association for Computer Machinery, 959–64.
- Kite, Mary E., Gary D. Stockdale, Bernard E. Whitley, and Blair T. Johnson (2005), "Attitudes Toward Younger and Older Adults: An Updated Meta-Analytic Review," *Journal of Social Issues*, 61 (2), 241–66.
- Kleine, Robert E. III, Susan Schultz Kleine, and Jerome B. Kernan (1993), "Mundane Consumption and the Self: A Social-Identity Perspective," *Journal of Consumer Psychology*, 2 (3), 209–35.
- Kumar, Amit and Thomas Gilovich (2015), "To Do or to Have, Now or Later? The Preferred Consumption Profiles of Material and Experiential Purchases," *Journal of Consumer Psychology*, 26 (2), 169–78.
- Maslow, Abraham H. (1970), *Motivation and Personality*, 2nd edition, New York: Harper & Row.
- McClelland, David C., John W. Atkinson, Russell A. Clark, and Edgar L. Lowell (1953), *The Achievement Motive*, East Norwalk, CT: Appleton-Century-Crofts.
- Petrie, Keith J., Roger J. Booth, James W. Pennebaker, Kathryn P. Davison, and Mark G. Thomas (1995), "Disclosure of Trauma and Immune Response to a Hepatitis B Vaccination Program," *Journal of Consulting and Clinical Psychology*, 63 (5), 787–92.
- Petty, Richard E. and John T. Cacioppo (1986), Communication and Persuasion: Central and Peripheral Routes to Attitude Change. New York: Springer.
- Pham, Michel Tuan (1998), "Representativeness, Relevance, and the Use of Feelings in Decision Making," *Journal of Consumer Research*, 25 (2), 144–59.
- ——. (2013), "The Seven Sins of Consumer Psychology," Journal of Consumer Psychology, 23 (4), 411–23.
- Read, Daniel (2007), "Experienced Utility: Utility Theory from Jeremy Bentham to Daniel Kahneman," *Thinking & Reasoning*, 13 (1), 45–61.
- Reed, Americus II (2004), "Activating the Self-Importance of Consumer Selves: Exploring Identity Salience Effects on Judgments," *Journal of Consumer Research*, 31 (2), 286–95.
- Rogers, Carl R. (1947), "Some Observations on the Organization of Personality," *American Psychologist*, 2 (9), 358–68.
- Schlosser, Ann E. (1998), "Applying the Functional Theory of Attitudes to Understanding the Influence of Store Atmosphere on Store Inferences," *Journal of Consumer Psychology*, 7 (4), 345–69.
- Sedikides, Constantine and Michael J. Strube (1997), "Self-Evaluation: To Thine Own Self Be Good, To Thine Own Self Be Sure, To Thine Own Self Be True, and to Thine Own Self Be Better," in Advances in Experimental Social Psychology, Vol. 29, ed. Mark P. Zanna, San Diego: Academic Press, 209–69.
- Shavitt, Sharon, Tina M. Lowrey, and Sang-Pil Han (1992), "Attitude Functions in Advertising: The Interactive Role of Products and Self-Monitoring," *Journal of Consumer Psychology*, 1 (4), 337–64.

Snyder, Mark and Kenneth G. DeBono (1985), "Appeals to Image and Claims about Quality: Understanding the Psychology of Advertising," *Journal of Personality and Social Psychology*, 49 (3), 586–97.

- Solomon, Michael R. (2017), Consumer Behavior: Buying, Having, and Being, 12th ed., Upper Saddle River, NJ: Pearson.
- Stanton, Annette L., Sharon Danoff-Burg, Lisa A. Sworowski, Charlotte A. Collins, Ann D. Branstetter, Alicia Rodriguez-Hanley, Sarah B. Kirk, and Jennifer L. Austenfeld (2002), "Randomized, Controlled Trial of Written Emotional Expression and Benefit Finding in Breast Cancer Patients," *Journal of Clinical Oncology*, 20 (20), 4160–8.
- Stigler, George J. (1950), "The Development of Utility Theory," *Journal of Political Economy*, 58 (4), 307–27.
- Tamir, Diana I. and Jason P. Mitchell (2012), "Disclosing Information about the Self Is Intrinsically Rewarding,"

- Proceedings of the National Academy of Sciences, 109 (21), 8038–43.
- Trope, Yaacov (1975), "Seeking Information about One's Ability as a Determinant of Choice among Tasks," *Journal of Personality and Social Psychology*, 32 (6), 1004–13.
- ——. (1980), "Self-Assessment, Self-Enhancement, and Task Preference," *Journal of Experimental Social Psychology*, 16 (2), 116–29.
- Vohs, Kathleen D., Roy F. Baumeister, Brandon J. Schmeichel, Jean M. Twenge, Noelle M. Nelson, and Dianne M. Tice (2014), "Making Choices Impairs Subsequent Self-Control: A Limited-Resource Account of Decision Making, Self-Regulation, and Active Initiative," *Motivation Science*, 1 (S), 19–42.
- Zajonc, Robert B. (1980), "Feeling and Thinking: Preferences Need No Inferences," *American Psychologist*, 35 (2), 151–75.