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Are you type A or type B? An optimist or a pessimist? Intuitive or analytical? Consumers are motivated to learn about the self, but they may not always accept what they learn. This article explores how the desire for self-discovery leads people to seek but not necessarily accept the feedback they receive and the implications this has for consumption behavior. Specifically, this article examines the case of consumers who value being unconstrained: people with independent self-construals and those who have high levels of reactance motivation. The authors argue that these people often view self-knowledge as a constraint on the self and subsequently reject it—even when the self-knowledge has neutral or positive implications for self-esteem. Results across five studies demonstrate that independents and high reactants feel constrained by self-knowledge, and this causes them to reject and make consumption choices inconsistent with it even as they actively seek to learn about themselves. In contrast, interdependents and low reactants do not feel constrained by self-knowledge, and consequently, they accept and incorporate it into their consumption decisions.

Keywords: self-knowledge, self-construal, reactance, identity threat

How Asking “Who Am I?” Affects What Consumers Buy: The Influence of Self-Discovery on Consumption

Are you an introvert or an extrovert? Would your friends characterize you as a dreamer or a realist? Do you tend to plan things out or are you more of a fly-by-the-seat-of-your-pants type? For most people, self-discovery is an integral part of everyday life. People learn about themselves through the choices they make, the interactions they have with others, the successes they achieve, and the failures they suffer through. They discover facets of themselves through the emotions they feel, the praise or criticisms they receive from others, and the reactions they have to the events that occur in their lives. With each piece of self-knowledge garnered, people learn more about themselves and come closer to defining who they are.

Researchers have argued that people have an innate desire to learn about themselves (Baumeister 1998; Trope 1980). Consequently, they like to know what others think of them, how good they are at a certain skill, how successful they are relative to others, and so on. It is important to note that people not only learn about themselves passively over the course of their daily lives but often actively seek self-related information as well. Accordingly, in laboratory experiments, researchers have found that people prefer tasks of high informational value about their own ability over tasks of low informational value (Trope 1975) and will actually pay for information about the impressions others have formed of them (Swann and Read 1981).

Having noted this interest in self-discovery, firms have blanketed the marketplace with products and services aimed at helping people better understand and define the self. These self-discovery products and services range widely. High-end department stores such as Nordstrom and Bloomingdale's offer color consultations to cosmetics shoppers so that they can learn whether “summer” or “winter” colors are better for their complexions. Gyms and fitness centers offer fitness assessments in which trained professionals help consumers understand what type of exercisers they are and

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which activities and movements they should be doing to reach their fitness goals. Self-help books, such as *The Journey Called You: A Roadmap to Self-Discovery and Acceptance* and *The Gift of Being Yourself: The Sacred Call to Self-Discovery*, profess to help consumers learn about the self, and crafts classes promise to aid consumers in discovering the basket weaver or cake decorator within themselves. Even products that are not explicitly aimed at self-discovery often have a self-discovery component to them. For example, many popular movies and books, such as *Under the Tuscan Sun*, *Good Will Hunting*, and *Eat, Pray, Love*, glorify the process of self-discovery and acceptance.

From a logical standpoint, this drive toward self-discovery makes sense: The more clearly people understand themselves, the more likely they are to make appropriate decisions about what job to take, who to marry, what goals to pursue, and so on. Understanding preferences and proclivities can save valuable resources: If people recognize and appreciate their own personalities, they will not waste money on “spring” makeup colors when they are unmistakably a “winter” complexion, nor will they squander precious self-control resources on the Atkins diet when their specific body type would respond best to the Zone diet.

However, for self-discovery to be helpful, people must accept and incorporate the newly learned self-knowledge into their self-concepts and daily behavior. For example, it is only useful for a woman to know that she has an hourglass rather than a rectangular figure if she purchases clothing that flatters her particular shape. We argue that the process of discovering and defining the self can also be perceived as a means of placing boundaries and constraints on what the self can be. If a person is type A, by definition he or she cannot also be type B, and if a person is a “neat freak,” he or she is not simultaneously a slob. This means that for people who are sensitive to the prospect of limitations, the findings from self-discovery can represent a type of constraint on who they can be. This is true even when the results of self-discovery are neutral or even positive in their implications for self-esteem. Thus, we argue that these people may actually reject the findings of self-discovery instead of incorporating them into the self-concept and relying on them to make more informed life choices.

In this study, we explore how the urge to accumulate self-knowledge might have unexpected effects on consumption behavior. More specifically, we investigate when people accept and incorporate the conclusions of self-discovery into their consumption choices and when they reject them. We argue that the degree to which people accept what they learn in a self-discovery process depends on whether they ultimately perceive the knowledge as a tool for understanding or as a constraint on the self. We suggest that for people who are sensitive to the prospect of constraint (e.g., those with independent self-construals, those with relatively high levels of reactance), the accrual of self-knowledge puts them between the proverbial rock and hard place: Although such people are innately driven to discover the self, the very act of defining the self is inconsistent with their conception of the self as an indefinable whole. Thus, we expect that independents and high reactants will reject the findings of self-discovery and make consumption choices inconsistent with them, even as they actively seek to learn about themselves. In contrast, for people who are not sensitive to the

prospect of constraint (e.g., those low in reactance, those characterized by interdependent self-construals), the process of defining the self through self-discovery is not inconsistent with their self-conceptions. As a result, we expect interdependents and low reactants to accept the findings of self-discovery and incorporate this new knowledge into their subsequent consumption decisions.

Across a series of studies, we first explore how differences in self-construal lead to dissimilarities in how people respond to the acquisition of self-knowledge. Specifically, we find that independents reject their self-discovery findings and make consumption choices that are inconsistent with what might be expected according to their newly acquired self-knowledge. In contrast, we find that interdependents accept and utilize their self-discovery findings in making their consumption decisions. This effect occurs regardless of whether the self-information has neutral or even positive implications for self-esteem, suggesting that the limiting nature of self-definition, not threat from negative self-information, drives the results. Next, we rely on the strong emphasis that high-reactance people place on personal freedom to show that the restrictions created by self-discovery may cause these people to reject self-discovery conclusions. Specifically, we find that high-reactance people reject and make choices inconsistent with their self-discovery findings, whereas low-reactance people accept and make choices consistent with their self-discovery findings. Finally, we establish that the limiting nature of self-definition drives independents’ self-discovery-inconsistent choices by showing that feelings of being constrained mediate the relationship between self-construal and product choice. We begin by briefly reviewing the research on self-discovery and then discussing the literature streams on self-construal and reactance. Then, we present our hypotheses and the results of five studies. We conclude by discussing the theoretical and practical implications of our findings.

LITERATURE REVIEW

Who in the world am I? Ah, that’s the great puzzle.
—Lewis Carroll

As Lewis Carroll so eloquently writes, the self is a mystery. People do not directly perceive or know the self; instead, they (with the help of others around them) build up a body of beliefs about it (Higgins 1996). One way people acquire beliefs about the self is through seeking out self-related information. Ample work in both psychology and organizational behavior has suggested that people actively seek self-knowledge. For example, researchers have used lab experiments to demonstrate that people solicit feedback from interaction partners (Swann and Read 1981) and prefer high- to low-diagnostic tasks (Strube and Roemmele 1985). Other research has shown that people in corporate settings actively request feedback from their supervisors (Williams and Johnson 2000).

In the current research, we build on this work to suggest that the degree to which people accept the self-knowledge they acquire depends on whether they ultimately perceive the self-knowledge as a tool for understanding the self or as a constraint on what the self can be. Here, we choose not to focus on the specific motivations that drive the pursuit of self-knowledge (e.g., self-verification, self-assessment, self-

improvement, self-enhancement; Sedikides and Strube 1997). Instead, we focus on what accepting or rejecting self-knowledge means for the broader way people define themselves. Specifically, we suggest that people who see themselves as indefinable wholes might perceive self-knowledge as a constraint on the self and consequently reject it. In contrast, those who do not emphasize the wholeness of the self might view self-knowledge as a tool for understanding the self and, as a result, accept and incorporate it into their working self-definition.

OVERVIEW OF STUDIES

In this article, we explore how the desire for self-discovery leads people to seek but not necessarily accept self-knowledge and the important consequences this has for consumption behavior. In the studies that follow, we operationalize self-knowledge as feedback from personality quizzes. Personality quizzes have long been a staple of popular magazines such as *Men's Health*, *Reader's Digest*, and *Glamour*; moreover, with the advent of the Internet, such quizzes have become even more widespread. For example, a Google search for "personality quiz" returned 2.42 million hits, ranging from the fun and quirky (e.g., "Which superhero are you?") to more serious personality assessments (e.g., the Myers-Briggs Type Indicator). Note that personality quiz profiles resemble many commercial self-discovery products and services (e.g., color consultations, fitness assessments) in that the feedback they give has neither clearly positive nor negative implications for self-esteem. For example, it is unclear whether it is a positive or negative thing to be described as a "dreamer" or a "realist." The ambiguous nature of personality quiz feedback is in direct contrast to the majority of the research on self-knowledge seeking, in which it is apparent whether it is a good or bad thing to have received the feedback given (e.g., Baumeister and Cairns 1992). Although it follows from existing research that, in general, people reject negative but not positive self-knowledge, we suggest that certain classes of people reject all self-knowledge regardless of its implications for self-esteem. In other words, we propose that people who are sensitive to constraint resent the limitations imposed on them by being categorized as one type or another and that this will lead them to reject negative, neutral, and positive self-knowledge.

Importantly, we offered each participant the chance to take part in multiple studies, including, but not limited to, the ones in this research. In giving people the choice to participate, we both mimic the real world of many possibilities and rule out the possibility that people are reacting against the violation of personal freedom implied in being compelled to complete these studies rather than against the limiting nature of self-knowledge, as we suggest. In addition, participants' voluntary participation in these studies supports our contention that people are naturally drawn toward self-discovery, even if they do not always accept the findings. Thus, we know that all participants voluntarily took part in our studies and expect that those who are highly sensitive to limitations will reject the findings of self-discovery and those who are less sensitive will not.

STUDY 1A

There's no limit possible to the expansion of each one of us.

—Charles Schwab

If you were asked to describe yourself, would you talk about the unique traits and distinctive mannerisms that describe you and you alone, or would you talk about yourself in the context of your role as a friend, partner, sibling, or parent? Research on self-construal suggests that people differ fundamentally in how they conceptualize the self (Markus and Kitayama 1991; Singelis 1994). Those with independent self-construals see themselves as separate and autonomous entities comprising unique sets of attributes. Independents believe that these attributes—which include traits, abilities, motives, and values—are an essential aspect of the self and the primary determinant of success (Heine et al. 1999; Markus and Kitayama 1991). Thus, an independent soccer player is likely to believe that his or her soccer skills are due to his or her own natural abilities and distinctive blend of perseverance and determination.

In contrast, people with interdependent self-construals view and define themselves in the context of their social relationships, roles, and duties. For interdependents, self-definition is about seeing the self as part of a greater whole rather than being a self-sufficient person. Success is not defined on the individual person's unique set of attributes nor is being a separate and self-contained whole valued. Accordingly, an interdependent soccer player is less likely to attribute success solely to his or her own skills and abilities and more likely to credit a coach and a supportive family for his or her athletic prowess. Consistent with this line of reasoning, previous research has shown that media in Japan (traditionally defined as an interdependent culture) attribute the success of Olympic athletes not just to personal attributes but also to their background and social and emotional experiences, and media in the United States (typically portrayed as an independent culture) explain successful Olympic performance predominantly through personal characteristics (Markus et al. 2006). Thus, independents view themselves as primarily responsible for their successes, whereas interdependents see their victories more as a product of their relationships and place in society.

Independent selves see their personal attributes as responsible for their successes in particular and their behavior in general; therefore, it follows that independents should place a greater emphasis on their own collection of traits. For an independent to admit that he or she lacks a particular ability or a specific trait is to acknowledge that he or she has a weakness or deficiency that may preclude success in a particular domain. Given that, in general, people believe they have a better-than-average chance of succeeding at most activities (Regan, Snyder, and Kassin 1995) and that they are above average on a wide range of personal characteristics (e.g., Brown 1986), we expect independents to view the limiting nature of self-knowledge as threatening. Thus, we expect that independents will reject the findings of self-discovery rather than use such knowledge to update their self-concepts and to make more informed decisions. In contrast, because interdependents attribute their success to their relationships rather than their personal abilities, the prospect of a constrained self should not threaten their prospects of success.

Therefore, we expect that interdependents will accept the findings of self-discovery and incorporate them into their subsequent choices.

Method

Participants and design. Potential participants were given the option of taking part in several studies, including this one. Seventy-nine undergraduate students chose to take part in this study. We used a 2 (manipulated quiz profile: low-competence/high-excitement vs. high-competence/low-excitement profile) \times measured self-construal between-subjects design.

Quiz profile manipulation. Participants completed a short quiz consisting of personality items (“I prefer a life that revolves around spontaneity and flexibility rather than schedules and organization”), IQ questions (“Which one of the letters does not belong in the following series: A - D - G - J - M - O - P - S?”), and the 24-item Singelis Self-Construal Scale (1994). All participants were told that they performed better than 95% of similar college students on one dimension and better than 70% on a second dimension. Because the participant population is a talented and competitive one, pretesting showed that they perceived being in the 70th percentile of similar college students as negative and being in the 95th percentile as positive. Thus, we gave participants self-information that was ambiguous in terms of its overall self-esteem implications. In the low-competence/high-excitement condition, participants received profiles that included the following details along with a histogram highlighting the percentiles:

Your score indicates that you performed better than 70% of North Carolina college students in regard to having a Competent personality (as judged by levels of reliability, responsibility, dependability and efficiency). Your score also indicates that you scored better than 95% of North Carolina college students in regard to having an Exciting personality (as judged by levels of spiritedness and creativity).

In the high-competence/low-excitement condition, participants received profiles and a histogram indicating the following:

Your score indicates that you performed better than 70% of North Carolina college students in regard to having an Exciting personality (as judged by levels of spiritedness and creativity). Your score also indicates that you scored better than 95% of North Carolina college students in regard to having a Competent personality (as judged by levels of reliability, responsibility, dependability and efficiency).

After completing the personality quiz, participants received their quiz profiles and indicated the extent to which the profile was accurate on a seven-point scale (1 = “not true at all,” and 7 = “extremely true”).

Although we could have given participants information regarding their levels of conceivably any trait, we chose to focus on competence and excitement for several reasons. First, both people and brands can be characterized in terms of competence and excitement (Aaker 1997). In our theorizing, we predicted that the choices independents, interdependents, and high and low reactants made would depend on whether they perceived the product options as being consis-

tent or inconsistent with the self-information received. Therefore, it was important to choose self-information that would apply to both the people receiving the information and the products from which they could choose. Second, competence and excitement are each prized as highly desirable personality traits (Anderson 1968). Excitement is a component of extroversion, which has been linked to a host of positive outcomes, including elevated social status (Anderson et al. 2001) and increased subjective well-being (Costa and McCrae 1980). Competence is a component of conscientiousness and has been related to advantageous consequences such as longevity (Friedman et al. 1995) and increased job performance (Barrick and Mount 1991).

Singelis Self-Construal Scale. Participants completed both the independent and interdependent subscales of the Singelis Self-Construal Scale (1994). Each subscale consisted of 12 seven-point scale items (1 = “strongly disagree,” and 7 = “strongly agree”). Interdependent subscale items included “It is important for me to maintain harmony within my group,” and independent items included “I act the same way no matter who I am with.”

Magazine choice. Participants were asked to select one of two nationally distributed magazines: *Business 2.0* and *Consumer Reports*. The two magazines had been pretested on a separate group of undergraduate students from the same population using Aaker’s (1997) brand personality dimensions. Pretest results indicated that *Consumer Reports* was considered higher in competence ($t(14) = 4.73, p = .0003$) but lower in excitement ($t(14) = -2.94, p = .01$) relative to *Business 2.0*. Choice of magazine constituted the main dependent measure. We expected that independent selves would reject the information their quiz profile gave and select the magazine with a personality opposite to that in their profile. In contrast, we anticipated that interdependent selves would incorporate the information their quiz profile gave into their decision by selecting the magazine with a personality similar to that in their profile.

Procedure. Upon arriving at the study site, participants were randomly assigned to a quiz profile condition. Then, they began the experiment by taking the personality quiz, receiving the profile and making a choice between the two magazines. Last, they provided some basic demographic information before being thanked and fully debriefed.

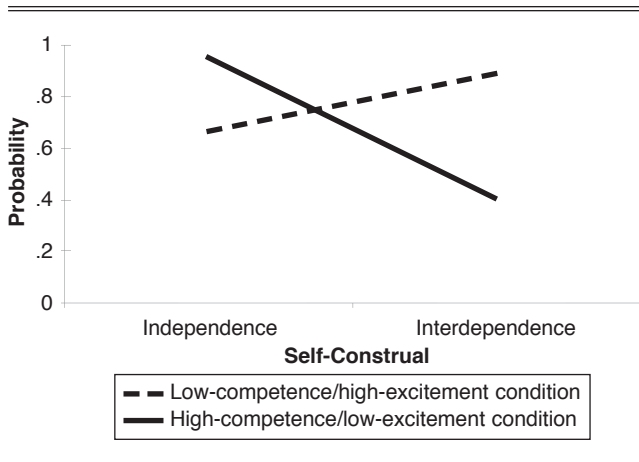
Results

To enable us to compare predominantly independent and predominantly interdependent participants, we first created an index measure of self-construal by subtracting the mean score on the independence scale (12 items, $\alpha = .78$) from the mean score on the interdependence scale (12 items, $\alpha = .82$) (Holland et al. 2004). Then, we analyzed the magazine choice data using a logistic regression model with self-construal, quiz profile condition, and their interaction as predictors. We included the degree to which participants believed the quiz profile accurately reflected themselves as a covariate in the analysis.

As we predicted, the study results revealed a significant interaction between self-construal and quiz profile type ($\beta = .53, \chi^2 = 4.89, p = .03$). Figure 1 illustrates our results. To examine this interaction in more depth, we performed a spotlight analysis (Aiken and West 1991), in which we compared the probability of participants choosing *Business 2.0*

Figure 1

STUDY 1A: PROBABILITY OF THE LOW-COMPETENCE/HIGH-EXCITEMENT MAGAZINE BEING CHOSEN BY CONDITION AND SELF-CONSTRUAL



(the low-competence/high-excitement magazine) in the low-competence/high-excitement and in the high-competence/low-excitement profile conditions at two standard deviations greater than and less than the mean level of self-construal. Results revealed that interdependents were more likely to choose *Business 2.0* (the low-competence/high-excitement magazine) when they were in the low-competence/high-excitement condition and *Consumer Reports* (the high-competence/low-excitement magazine) when they were in the high-competence/low-excitement condition ($\beta = .69$, $\chi^2 = 4.38$, $p = .04$). In other words, interdependent people in both conditions incorporated their quiz profiles into their decisions and chose the brand with traits most similar to their own. In contrast, independents were more likely to choose *Consumer Reports* (the high-competence/low-excitement option) when they were in the low-competence/high-excitement condition and *Business 2.0* (the low-competence/high-excitement option) when they were in the high-competence/low-excitement condition ($\beta = -.66$, $\chi^2 = 3.78$, $p = .05$). In other words, independents in both conditions tended to reject their self-discovery findings and choose the brand with traits different from their own. Notably, neither independence nor interdependence significantly predicted feedback accuracy beliefs, reducing the plausibility of the notion that independent participants chose brands with different traits and interdependent participants chose brands with similar traits because of differences in likelihood to be persuaded.

Discussion

Consistent with our predictions, independent people made consumption decisions that were at odds with the information their personality quiz profiles gave them. In contrast, interdependent people made consumption choices that were in harmony with the self-information their quiz profiles gave them. Together, these results are in line with the notion that independents' hesitance and interdependents' readiness to embrace new self-knowledge lead them to respond to their self-discovery findings in such different ways. However, although these results are consistent with that idea, they do not show that independents and interde-

pendents differ in their acceptance of self-knowledge explicitly, making it difficult to rule out alternative explanations. For example, it is possible that all participants accepted the new self-information equally but that independents and interdependents differed in some other respect that led them to choose as they did. We address this concern in Study 1b.

STUDY 1B

Trying to define yourself is like trying to bite your own teeth.

—Alan Watts

The goal of Study 1b is to examine whether independents and interdependents differ in their reluctance and willingness to change their self-concepts in response to their self-discovery findings. We expect that interdependents will readily accept and incorporate new self-information into their self-concepts while independents will be reluctant to do so.

Method

Participants and design. Participants were 40 undergraduate students who chose to take part in this study. We used a 2 (manipulated quiz profile: low-competence/high-excitement vs. high-competence/low-excitement profile) \times measured self-construal between-subjects design. Participants completed the same personality quiz used in Study 1a and received the same quiz profiles.

Self-concept changes. Participants responded to several questions regarding whether they accepted their quiz profiles and incorporated the information into their self-views. Specifically, participants were asked, "How likely are you to incorporate this feedback into your own descriptions of yourself?" "If someone were to ask you about your personality as it relates to being competent and exciting, how likely are you to consider the information you received in the personality quiz in your response?" "How likely are you to consider the ways in which this information can help you make better decisions?" "How likely are you to remember this feedback?" and "How helpful was this feedback in helping you understand more about yourself?" Participants answered the first four questions on a seven-point scale (1 = "very unlikely," and 7 = "very likely") and the final question on a separate seven-point scale (1 = "not at all helpful," and 7 = "very helpful"). These responses served as our dependent variable.

Procedure. Upon arriving at the study site, participants were randomly assigned to a quiz profile condition. Then, participants completed the personality quiz and received their quiz profiles before answering the questions regarding their self-concept changes. Upon completion of all tasks related to the study, participants were thanked and fully debriefed.

Results

To conduct our analyses, we created two index measures: an index of the changing self-concept scale items ($\alpha = .88$) and an index measure of self-construal in which we subtracted the mean of the independence scale ($\alpha = .78$) from the mean of the interdependence scale ($\alpha = .85$) (Holland et al. 2004). Next, we regressed self-construal, quiz profile condition, and their interaction on the self-concept index.

Again, we included the degree to which participants believed that the personality quiz profile was accurate about themselves in the analysis as a covariate. As expected, we found a main effect of self-construal ($\beta = .45$, $t(36) = 2.48$, $p = .02$) such that the more interdependent people were, the more likely they were to report changes in their self-concepts based on the information in their quiz profiles. There were no other significant effects.

Discussion

Consistent with our expectations, interdependents reported that they were more willing to accept and incorporate the self-information they received into their self-concepts relative to independents. Taken together with the results from Study 1a, these findings suggest that independents are reluctant to accept new self-knowledge, and this can have some unexpected consequences for consumption. Notably, the self-information in Studies 1a and 1b was of an indeterminate valence; that is, participants were told that they were strong in one dimension and weak in another. An alternative explanation for our results is that independents were reacting to the negative information in the profile rather than the prospect of a limitation to the self. Prior research has shown that independents are particularly sensitive to negative feedback (e.g., Brockner and Chen 1996); therefore, they could have chosen the brand inconsistent with their profile as a way of proving the assessment wrong rather than as a reaction to the self being bounded and constrained. We attempt to rule out this alternative explanation in Study 1c.

STUDY 1C

Each of us is in truth an unlimited idea of freedom.
Everything that limits us, we have to put aside.

—Richard Bach

In Study 1c, our goal is to rule out the possibility that independents were reacting to the negative self-information given them in previous studies rather than the self-limitation of being categorized as one type or another. To rule this out, we use only positive self-information in Study 1c. Given that people are generally more than amenable to learning favorable things about the self (e.g., Baumeister and Cairns 1992), a replication of our results with only positive self-information would suggest that the prospect of limitations is driving our results, not a response to negative self-information. Thus, we again expect independents to select brands that are inconsistent with the self-information they receive, and we expect interdependents to make choices that reflect the self-information they learn.

Method

Participants and design. Participants were 58 undergraduate students who chose to take part in this study. We used a 2 (manipulated quiz profile: high-excitement vs high-competence profile) \times measured self-construal between-subjects design.

Quiz profile manipulation and self-construal measure. Participants completed the same personality quiz as in previous studies before receiving quiz profiles that depicted them as being high in either competence or excitement. Specifically, results were presented with a histogram that highlighted percentiles along with the following details:

High-excitement condition: Your score indicates that you scored better than 95% of North Carolina college students that have taken this quiz in regard to having an Exciting personality (as judged by levels of spiritedness and creativity).

High-competence condition: Your score indicates that you scored better than 95% of North Carolina college students that have taken this quiz in regard to having a Competent personality (as judged by levels of reliability, responsibility, dependability and efficiency).

Participants also indicated how accurate they believed the quiz profile to be about themselves on a seven-point scale (1 = “not at all,” and 7 = “extremely true”).

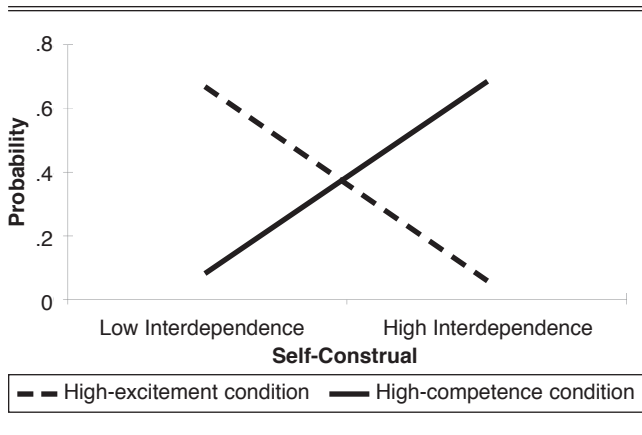
Magazine choice. We retained the same magazine choice dependent variable used in Study 1a: *Business 2.0* versus *Consumer Reports*. Participants were randomly assigned to receive either high-excitement or high-competence self-information. Then, they completed the personality quiz before receiving the profile information and making a choice between the two magazines. Last, participants provided basic demographic information and were thanked and debriefed.

Results

As in previous studies, we created an index measure of self-construal by subtracting the mean score on the independence scale (12 items, $\alpha = .65$) from the mean score on the interdependence scale (12 items, $\alpha = .84$) (Holland et al. 2004) and included the degree to which participants believed that the personality quiz profile was accurate as a covariate. The model used in the analysis to predict brand choice was the same as in Study 1a: a logistic regression model with measured self-construal, quiz profile condition, and the two-way interaction of self-construal and condition as predictors.

As expected, we found a significant interaction between self-construal and condition ($\beta = .63$, $\chi^2 = 6.08$, $p = .01$) on magazine choice and no other significant effects. A spotlight analysis showed a significant simple effect of condition at high interdependence ($\beta = .98$, $\chi^2 = 5.75$, $p = .02$). Interdependents in the high-excitement condition were more likely to choose *Business 2.0* (high excitement) over *Consumer Reports* (see Figure 2). Interdependents in the high-competence condition were more likely to choose *Consumer Reports* (high competence) than *Business 2.0*. The simple effect of condition at high independence was also significant ($\beta = -.86$, Wald $\chi^2 = 4.46$, $p = .03$). Independents in the high-excitement condition were more likely to choose *Consumer Reports* (high competence) than *Business 2.0*. Independents in the high-competence condition were more likely to choose *Business 2.0* (high excitement) than *Consumer Reports*. Taken as a whole, interdependents made choices consistent with the self-information they received, and independents made choices inconsistent with self-information. As in the previous studies, neither independence nor interdependence predicted accuracy beliefs, again reducing the plausibility that differences in persuasion can explain the results.

Figure 2
STUDY 1C: PROBABILITY OF THE HIGH-EXCITEMENT
MAGAZINE BEING CHOSEN BY CONDITION AND SELF-
CONSTRUAL



Discussion

Consistent with our expectations, the results of Study 1c replicated those of Study 1a: Independents made consumption choices that were inconsistent with the self-information they received, and interdependents made consumption choices that incorporated the self-information they received. It is important to note that participants in Study 1c were given only positive self-information. Because independents still acted inconsistently with their self-discovery findings, we can conclude that they were not simply reacting to the negative information, as participants in Study 1a may have been. This lends support to the notion that independents viewed the particular quiz profile they received as a limitation to the self and that this led them to make decisions that were contrary to what might be expected according to the self-knowledge they had just discovered.

However, it is possible that independents' choices were less motivated by a desire to be unconstrained than by a desire for uniqueness. Prior research has suggested that independents value being distinct from others and that interdependents value conformity. Accordingly, researchers have shown that people exposed to personal self-construals ("I") accentuate differences from others by displaying social comparison contrast effects, while people exposed to social self-construals ("we") highlight similarities to others by exhibiting social comparison assimilation effects (Stapel and Koomen 2001). Similarly, previous research has shown that independents prefer brands that are framed as demonstrating points of distinction from others and that interdependents favor brands that are billed as establishing points of similarities with others (Aaker and Schmitt 2001). However, in Studies 1a and 1c, independents made choices that moved away from their unique status (i.e., they chose brands inconsistent with their unique strength of being in the "95th percentile" in excitement or competence), a finding that is inconsistent with this explanation.

In Study 2, we further explore the idea that self-knowledge can represent a limitation on the self. If self-knowledge is constraining, as we argue, people who are known to react against constraints should also resent the limiting nature of

self-knowledge. In the next study, we examine the case of people who differ in reactance motivation.

STUDY 2

Nothing is more difficult, and therefore more precious, than to be able to decide.

—Napoleon Bonaparte

How do people react when they cannot do what they want? Psychological reactance theory suggests that people believe they are free to engage in "any conceivable act" and will act to regain that freedom if it is threatened or eliminated (Brehm 1966). When people encounter either a real or threatened restriction of freedom, they experience a state of psychological reactance, which might lead them to engage in several behaviors. They might act to restore the specific freedom that was taken away (Brehm 1966), experience negative emotions such as frustration and hostility (Wicklund 1974), become increasingly interested in attaining the restricted behavior (Brehm 1966), and/or negatively evaluate the source of the restriction (Clee and Wicklund 1980). Prior research has demonstrated that restrictions of freedom can encompass anything from stockouts (Fitzsimons 2000), to product recommendations (Fitzsimons and Lehmann 2004), to explicit orders not to do something (Brehm 1966).

Researchers originally hypothesized reactance to be situation specific and to apply to people in general, but more recent research has demonstrated that people chronically differ in their levels of reactance proneness such that highly reactant people respond strongly to restrictions of freedom, whereas more weakly reactant people experience little reactance when their freedoms are threatened or eliminated (Hong and Faedda 1996). As a personality variable, reactance is positively correlated with other personality variables such as internal locus of control (Brehm and Brehm 1981), aggression, dominance, defensiveness, and autonomy (Dowd and Wallbrown 1993). Dowd et al. (1994) characterize reactant people as being less concerned with making a good impression on others and less likely to follow social norms. Thus, reactants tend to be people who "march to the beat of their own drum," place high value on their autonomy and independence, and resent being limited in any way.

As a result of their fierce insistence on personal freedom, reactant people should display a heightened sensitivity to potential restrictions of freedom, including those inherent in self-definition. That is, reactants should resent being characterized as type A because this limits their ability to also be type B. We designed Study 2 to examine whether people characterized by chronically high levels of reactance might be especially sensitive to and threatened by the limiting nature of self-knowledge. We expect that relative to low reactants, high reactants are more likely to react against the quiz feedback they receive. We also designed Study 2 to rule out the possibility that our effects are manipulation specific. Accordingly, the experimental manipulations we used in Study 2 differ from those used in the previous studies.

Method

Participants and design. Participants were 75 undergraduate students who chose to take part in this study. For this study, we used a 2 (manipulated quiz profile: brand con-

scious vs. not brand conscious) \times measured reactance between-subjects factorial design.

Quiz profile manipulation. In this study, participants completed a short product choice quiz consisting of an initial series of product choices followed by a quiz profile and then a second series of product choices. The two product choice series each consisted of several product pairs in an assortment of consumer packaged goods categories, and participants were asked to select one product per pair. Product pairs consisted of two brand-name products (e.g., Jelly Belly and Starburst jelly beans), two generic products (e.g., Kroger-brand and Lowes Foods-brand canned kidney beans), or one brand-name and one generic product (e.g., Energizer and CVS-brand batteries) in the same product category. In the brand-conscious condition, participants received the following self-information:

Your choices reveal that you are more brand conscious than the average consumer. When making choices within a given product category, you are more likely to use brand information to make your selection than the average consumer. Thus, you are more likely to pick the brand name product over its generic counterpart.

In the not-brand-conscious condition, participants received the following self-information:

Your choices reveal that you are less brand conscious than the average consumer. When making choices within a given product category, you are less likely to use brand information to make your selection than the average consumer. Thus, you are equally as likely to pick the generic product as its brand name counterpart.

Dependent measure. The number of brand-name product choices made in the second choice set constituted our main dependent measure. We expect that when shown the brand-conscious profile, high reactants will make choices that are inconsistent with their self-information by selecting fewer brand-name items. In contrast, low reactants will select more brand-name items. Conversely, when shown the not brand-conscious profile, high reactants will select more branded items, while low reactants will select fewer branded items.

Hong Reactance Scale. Participants completed the 11-item Hong Psychological Reactance Scale (Hong and Faedda 1996). The questions were five-point scale items (1 = "strongly disagree," and 5 = "strongly agree") and included items such as "When something is prohibited, I usually think, 'That's exactly what I'm going to do'" and "I become frustrated when I am unable to make free and independent decisions."

Procedure. Upon arrival, participants were randomly assigned to a quiz profile condition. They began the study by taking the product choice quiz, receiving the quiz profiles, and making a second set of product choices. Finally, participants completed the Hong Reactance Scale and provided demographic information before being thanked and fully debriefed.

Results

To conduct our analyses, we first averaged participants' responses to the Hong Reactance Scale (Hong and Faedda 1996) to obtain a reactance index score for each participant ($\alpha = .77$). Then, we created a measure of brand-name

choices by summing the number of brand-name products picked in the second choice set. This index constituted our main dependent measure.

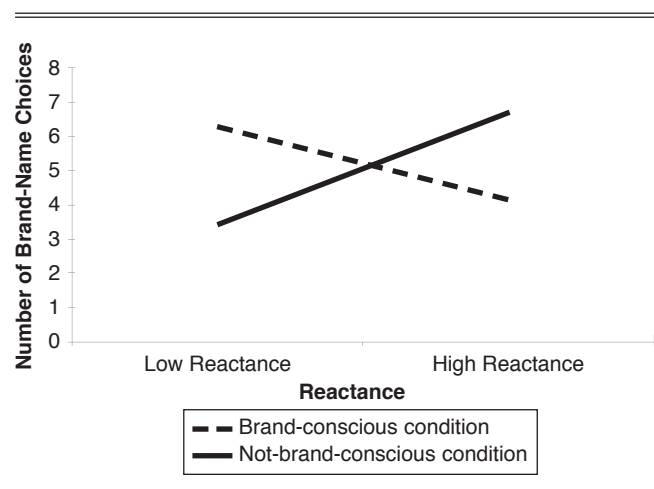
Because reactance was a continuous variable, we analyzed the data using regression with measured reactance, quiz profile type, and the interaction between the two as predictors. As we expected, the study results revealed a significant interaction between reactance and profile type ($\beta = -1.28$, $t(71) = -2.31$, $p = .02$). Then, we examined this interaction using a spotlight analysis (Aiken and West 1991) in which we compared the number of brand-name choices participants made in the two profile conditions at two standard deviations greater than and less than the mean reactance level. The results show that high-reactance people chose more generic products when they received the brand-conscious profile and more brand-name products when they received the not-brand-conscious profile ($\beta = -2.31$, $t(71) = -1.96$, $p = .05$). In contrast, low-reactance participants chose more generic products when they received the not-brand-conscious profile and more brand-name products when they received the brand-conscious profile ($\beta = 1.41$, $t(71) = 2.18$, $p = .03$). Figure 3 illustrates our results. It is important to note that reactance was not predicted by condition.

Discussion

Consistent with our hypotheses, low-reactance people accepted and applied the self-knowledge they received in making their decisions, and high-reactance people did not. Moreover, this effect occurred regardless of the content of the self-knowledge; that is, high-reactance people reacted against both knowledge that they were less brand conscious than the average consumer and knowledge that they were more brand conscious. Thus, for high-reactance people, the very act of receiving self-knowledge and being classified in a specific way was enough to arouse feelings of self-threat, regardless of what that knowledge was.

Taken together, the results of Studies 1 and 2 reveal that independents and high reactants reject self-discovery findings while interdependents and low reactants accept them. Although reactance is by definition about constraints, it

Figure 3
STUDY 2: NUMBER OF BRAND-NAME PRODUCTS CHOSEN
BY CONDITION AND REACTANCE



does not necessarily follow from our results at this point that sensitivity to limitation also drives the behavior of independents and interdependents. In Study 3, we explore the relationship between self-construal and reactance to shed light on why independents behave like high reactants and why interdependents act like low reactants in response to self-discovery findings.

STUDY 3

To define is to limit.

—Oscar Wilde

We designed Study 3 with several goals in mind. First, we intended it to examine the relationship between self-construal and reactance. Although people differ chronically in their levels of reactance proneness, feelings of reactance may also arise in response to particular situations. If independents chafe against self-limits the way high reactants do, we would expect independents to report increased levels of state reactance in response to the limitations inherent in self-discovery findings. Conversely, if interdependents are not bothered by self-limits, we would expect them to report decreased levels of state reactance. Importantly, we would also expect these feelings of state reactance to mediate the relationship between self-construal and subsequent choice—that is, that feelings of reactance can explain why independents and interdependents react to self-information the way they do. Furthermore, Study 3 includes a no-self-information condition to provide a neutral baseline for comparison. If our effects are being driven by differences in how independents and interdependents react to self-information, we would not expect to observe differences between the two types of people in the no self-information conditions. Finally, we also designed this study to rule out the possibility that our results from Studies 1a–1c were driven by individual differences other than self-construal that might correlate with measured self-construal. Thus, we prime rather than measure self-construal in this study.

Method

Participants and design. Participants were 112 adults who were recruited by a marketing research firm to complete this study online. We used a 3 (manipulated quiz profile: brand conscious vs. not brand conscious vs. no self-information) \times 2 (manipulated self-construal: independent vs. interdependent) between-subjects design.

Quiz profile manipulation. Participants in this study completed the same product choice quiz as participants in Study 2. In the brand-conscious condition, participants received self-information that they were more brand conscious than the average consumer. In the not-brand-conscious condition, participants were told that they were less brand conscious than the average consumer. Participants in the no-self-information condition did not receive any self-information.

Self-construal manipulation. Participants completed a “cognitive word exercise” that, in reality, was the Brewer and Gardner (1996) self-construal prime. As part of the prime, participants read a paragraph describing a trip to the city and were asked to carefully count all the pronouns that appeared in the text. In the independent paragraph, the text contained 19 pronouns that referred to “I” and “me,” and in the interdependent paragraph, the passage contained 19 pro-

nouns that referred to “we” and “us.” We included the degree to which participants counted pronouns incorrectly (i.e., the absolute value of the difference from the correct count) as a measure of attention, which serves as a covariate in the analyses that follow.

State measure of reactance. All participants who received quiz profiles were asked about their feelings toward the profile. To measure state feelings of reactance, we followed Lindsey’s (2005) approach and modified four items according to Hong’s psychological reactance scale (Hong and Faedda 1996). We simply replaced Lindsey’s original concern (reactions to bone marrow donation requests) with our own (reactions to brand consciousness information). Thus, participants responded to the following five-point scale items (1 = “strongly disagree,” and 5 = “strongly agree”) ($\alpha = .76$): “I am uncomfortable with being told how brand conscious I am,” “I do not like that I am being told how my consumer personality compares to others,” “It irritates me that the study told me about my levels of brand consciousness relative to others,” and “I dislike that I am being told how brand conscious I am.”

Dependent measure. We retained the same dependent measure as in Study 2: number of brand-name products chosen. We expect that people who are primed to be independent should make choices that are inconsistent with their quiz profiles, and people primed to be interdependent should make choices that are consistent with their profiles.

Procedure. Upon consenting to take part in the study, participants were randomly assigned to one of six conditions. Participants began by taking the initial product choice quiz before completing either the independence or interdependence prime. Then, participants in the self-information conditions received their quiz profiles, answered questions regarding feelings of reactance toward the information received, and made their second set of product choices. Participants in the no-self-information condition made the second set of product choices directly after completing the self-construal prime. All participants provided demographic information before being thanked and debriefed.

Results

To test whether the self-construal primes would affect the choices participants made in response to the self-information they received, we analyzed the data using analysis of variance with quiz profile condition, self-construal condition, and their interaction as predictors. As we expected, the data revealed a significant interaction of self-information and self-construal ($F(2, 105) = 6.14, p = .003$). Planned contrasts revealed that participants who were primed to be independent chose fewer brand-name products in response to the brand-conscious profile than in response to the not-brand-conscious profile ($F(1, 105) = 5.65, p = .02$; $M_{\text{independent/brand conscious}} = 3.13, M_{\text{independent/not brand conscious}} = 5.05$). In contrast, participants primed to be interdependent chose more brand-name products after receiving the brand-conscious profile than after receiving the not-brand-conscious profile ($F(1, 105) = 6.79, p = .01$; $M_{\text{interdependent/brand conscious}} = 5.09, M_{\text{interdependent/not brand conscious}} = 3.00$). In the brand-conscious profile conditions, participants in the independent condition chose fewer brands than those in the interdependent condition ($F(1, 105) = 6.17, p = .01$; $M_{\text{independent/brand conscious}} = 3.13, M_{\text{interdependent/brand conscious}} = 5.09$). In the not-brand-

conscious feedback conditions, independents chose significantly more brand-name products than their interdependent counterparts ($F(1, 105) = 6.21, p = .01$; $M_{\text{independent/not brand conscious}} = 5.05, M_{\text{interdependent/not brand conscious}} = 3.00$). In the no-feedback conditions, self-construal did not influence brand choice ($F(1, 105) = .08, p = .78$; $M_{\text{independent/no feedback}} = 4.06, M_{\text{interdependent/no feedback}} = 3.83$). Figure 4 illustrates the results.

To determine whether feelings of state reactance mediated the relationship between self-construal and subsequent choice, we conducted the series of regression analyses that Muller, Judd and Yzerbyt (2005) recommend for establishing mediated moderation. Focusing on just the self-information conditions, we first reestablished the significance of the previously discussed self-construal and feedback condition interaction ($t(1, 72) = 3.20, p < .01$). Next, we determined that self-construal had a significant main effect on the mediator ($t(1, 72) = -2.76, p = .01$), such that participants in the independent conditions reported higher levels of state reactance than those in the interdependent conditions ($M_{\text{independent}} = 4.57, M_{\text{interdependent}} = 3.52$), regardless of the feedback they received. Finally, we ascertained that the interaction of the self-construal and feedback condition on brand choice was no longer significant ($t(1, 70) = 1.66, p = .10$) when we controlled for the mediator (state reactance) and its interaction with self-information. Instead, we found a significant interaction between the mediator and feedback condition ($t(1, 70) = -2.95, p < .01$), indicating that the partial effect of the mediator on brand choices depends on the feedback condition. In summary, the overall effect of self-construal on choice is moderated by the feedback that participants received, and within each feedback condition, the relationship between self-construal and choice is mediated by feelings of state reactance.

Discussion

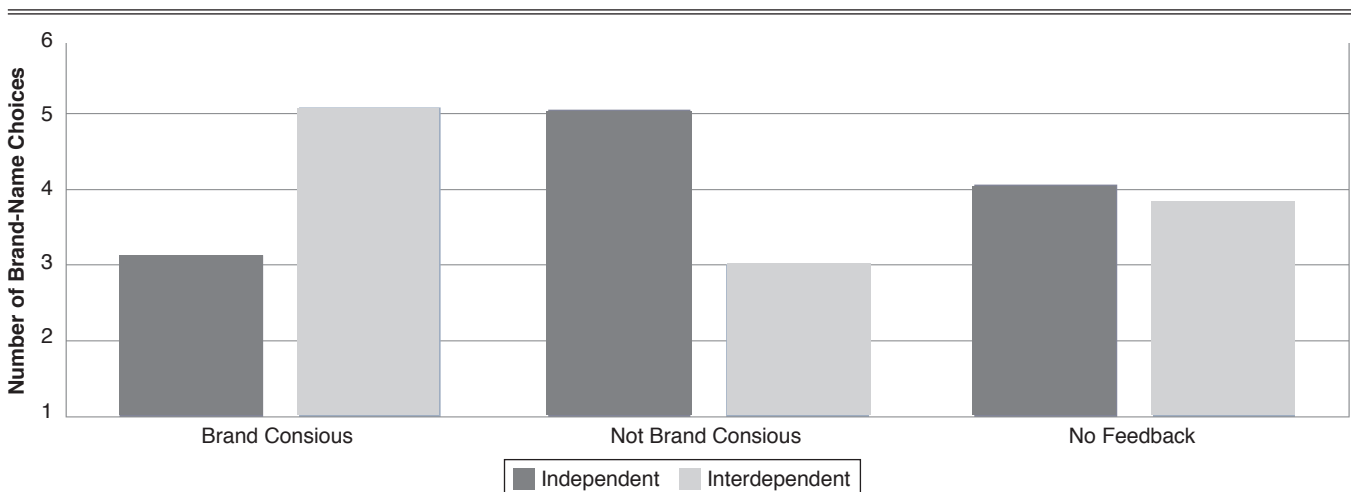
Consistent with our hypotheses, participants primed to be independent made product choices that were inconsistent with the self-knowledge they received, and participants primed to be interdependent made choices in line with their

self-information. In the no-self-knowledge conditions, independents did not differ from interdependents in terms of their choices. Importantly, reactance mediated the relationship between self-construal and brand choice. In the brand-conscious conditions, feelings of state reactance led independents to select fewer brand-name products, while the absence of reactance led interdependents to select more brand-name products. Conversely, in the not-brand-conscious conditions, feelings of state reactance led independents to select more brand-name products, and the absence of reactance led interdependents to select fewer brand-name products. Together, these results suggest that the presence or absence of feelings of constriction are crucial in determining whether people will accept self-discovery findings and apply them to make better and more adaptive consumption decisions.

GENERAL DISCUSSION

Taken as a whole, Studies 1–3 suggest that although self-discovery findings have the potential to help people make more informed decisions, certain people might make choices that are inconsistent with their self-discovery findings because they view the new self-knowledge as constraining. More specifically, we found that for people characterized as having an independent self-construal or high reactance motivation, the accrual of self-knowledge puts them in a catch-22: Although they are innately driven to discover the self, the very act of defining the self is inconsistent with their conception of the self as an indefinable whole. Thus, independents and high reactants rejected the findings of self-discovery and made consumption choices inconsistent with them even as they actively sought to learn about themselves. In contrast, for people described by low reactance or interdependent self-construals, the process of defining the self through self-discovery is not inconsistent with their self-conceptions. Accordingly, interdependents and low reactants accepted the findings of self-discovery and applied this new knowledge to their subsequent consumption decisions. Importantly, we found that independents and high reactants rejected their self-information

Figure 4
STUDY 3: NUMBER OF BRAND-NAME PRODUCTS CHOSEN BY CONDITION



regardless of what the information was. This suggests that the constraint inherent in being categorized as one type or another triggered our effects, not threat reactions to negative information.

We believe that this research offers several important contributions to research on self-motives and self-discovery. Specifically, we demonstrate a key theoretical refinement in terms of when people will seek and yet reject self-discovery findings, and we establish that this has significant consequences for subsequent consumption behavior. Importantly, we show that people might reject self-discovery findings even when the findings have neutral or positive implications for self-esteem. We also contribute to the growing body of literature in consumer behavior that suggests that people use consumption as a tool to enhance the self, especially when threatened (Dalton 2010; Gao, Wheeler, and Shiv 2009). In particular, we show that people's broad conceptualization of the self will determine how they use self-discovery findings and consumption to enhance the self. This research also brings together the reactance and self-construal literatures in a novel way, offering new insights into when and why they exert similar effects on consumers' choices.

Although we chose not to focus on the specific motivations driving the pursuit of self-knowledge, our work can be situated within the wider context of motivated self-discovery. Recent work has proposed that although the self-verification, self-improvement, and self-assessment motives each affect self-evaluation, they ultimately serve self-enhancement ends by gathering information that can then be used to create situations strategically or to react to environmental events in ways that maximize the positivity of the self (Sedikides and Strube 1997). In the current research, we identify sensitivity to limitations as a potential moderator of how people will respond to self-knowledge once it is acquired. Thus, whereas previous research on self-discovery motives has focused on why people seek self-knowledge and how this affects their response to that knowledge, our work concentrates on how sensitivity to limitations might moderate that response. In turn, this suggests that self-motives might interact with sensitivity to constraints to determine exactly how people will respond to new self-knowledge. Specifically, people who are sensitive to limitations might be more open to acquiring new self-knowledge when the self-verification, self-improvement, and self-assessment motives are activated than when the self-enhancement motive is active. Consequently, the motives behind why people seek self-knowledge may be an important moderator of how they will respond to self-discovery.

This work offers several directions for further research. One of the most interesting possibilities involves further exploration of how the content of self-knowledge might matter. The finding that independents and high reactants rejected both positive and mixed self-information raises the question whether independents and high reactants would reject all feedback. For example, would independents reject self-information that indicates that they are unique, and would high reactants rebuff self-information that characterizes them as fiercely autonomous? Our conceptualization suggests that independents and high reactants should still react against such self-information, though this is speculative and would be a worthwhile avenue for further research. However, the finding that independents and high reactants reject

positive information suggests that they at least reject information that is flattering to the self and consistent with the general tendency to have an overly positive self-concept (e.g., Brown 1986).

A second intriguing avenue for further research involves the differences between sources of self-information. As we noted previously, people can acquire self-knowledge in a variety of ways, ranging from externally provided feedback, such as that studied in the current research, to personal experience. Therefore, the source of the information might be an important boundary condition in shaping exactly how people will react. Specifically, it is possible that self-knowledge is perceived as less limiting when it is personally acquired than when it is externally provided. This can occur either because people are more prone to resisting the constraints provided by an external source (though see Carver and Scheier [1981] on self-imposed restrictions of freedom) or because self-knowledge accrued from experience is simply less salient to the person. Thus, both the source and the salience of self-knowledge may be key moderators in determining how people will respond.

Broadly, our results propose that the desire for self-knowledge can significantly influence people's consumption choices. This suggests that marketers should take care when they rely on self-discovery products and services to encourage their customers to buy their products. For example, color consultations and fitness assessments could actually lead consumers to make less adaptive choices rather than more informed ones. Thus, consumers' innate desire for self-discovery might be one need that marketers should be wary of tapping into, because it may lead to some surprising and unintended consequences.

REFERENCES

- Aaker, Jennifer L. (1997), "Dimensions of Brand Personality," *Journal of Marketing Research*, 34 (August), 347-56.
- and Bernd Schmitt (2001), "Culture-Dependent Assimilation and Differentiation of the Self: Preferences for Consumption Symbols in the United States and China," *Journal of Cross-Cultural Psychology*, 32 (5), 561-76.
- Aiken, Leona S. and Stephen G. West (1991), *Multiple Regression: Testing and Interpreting Interactions*. Thousand Oaks, CA: Sage Publications.
- Anderson, Cameron, Oliver P. John, Dacher Keltner, and Ann M. Kring (2001), "Who Attains Social Status? Effects of Personality and Physical Attractiveness in Social Groups," *Journal of Personality and Social Psychology*, 81 (1), 116-32.
- Anderson, Norman H. (1968), "Likableness Ratings of 555 Personality-Trait Words," *Journal of Personality and Social Psychology*, 9 (3), 272-79.
- Barrick, Murray R. and Michael K. Mount (1991), "The Big Five Personality Dimensions and Job Performance: A Meta-Analysis," *Personnel Psychology*, 44 (1), 1-26.
- Baumeister, Roy F. (1998), "The Self," in *The Handbook of Social Psychology*, 4th ed., Daniel T. Gilbert, Susan T. Fiske, and Gardner Lindzey, eds. New York: McGraw-Hill, 680-740.
- and Kenneth J. Cairns (1992), "Repression and Self-Presentation: When Audiences Interfere with Self-Deceptive Strategies," *Journal of Personality and Social Psychology*, 62 (5), 851-62.
- Brehm, Jack W. (1966), *A Theory of Psychological Reactance*. New York: Academic Press.
- Brehm, Sharon S. and Jack W. Brehm (1981), *Psychological Reactance: A Theory of Freedom and Control*. New York: Academic Press.

- Brewer, Marilynn B. and Wendi Gardner (1996), "Who Is This 'We'? Levels of Collective Identity and Self Representations," *Journal of Personality and Social Psychology*, 71 (1), 83–93.
- Brockner, Joel and Ya-Ru Chen (1996), "The Moderating Roles of Self-Esteem and Self-Construal in Reaction to a Threat to the Self: Evidence from the People's Republic of China and the United States," *Journal of Personality and Social Psychology*, 71 (3), 603–615.
- Brown, Jonathan D. (1986), "Evaluations of Self and Others: Self-Enhancement Biases in Social Judgments," *Social Cognition*, 4 (4), 353–76.
- Carver, Charles S. and Michael F. Scheier (1981), "Self-Consciousness and Reactance," *Journal of Research in Personality*, 15 (1), 16–29.
- Clee, Mona A. and Robert A. Wicklund (1980), "Consumer Behavior and Psychological Reactance," *Journal of Consumer Research*, 6 (4), 389–405.
- Costa, Paul T. and Robert R. McCrae (1980), "Influence of Extraversion and Neuroticism on Subjective Well-Being: Happy and Unhappy People," *Journal of Personality and Social Psychology*, 38 (4), 668–78.
- Dalton, Amy N. (2010), "In Defense of Retail Therapy: The Role of Consumption in Coping with Threats to Self-Worth," working paper, Hong Kong University of Science and Technology.
- Dowd, E. Thomas and Fred Wallbrown (1993), "Motivational Components of Client Reactance," *Journal of Counseling & Development*, 71 (5), 533–38.
- , ———, Daniel Sanders, and Janice M. Yesenosky (1994), "Psychological Reactance and Its Relationship to Normal Personality-Variables," *Cognitive Therapy and Research*, 18 (6), 601–612.
- Fitzsimons, Gavan J. (2000), "Consumer Response to Stockouts," *Journal of Consumer Research*, 27 (2), 249–66.
- and Donald R. Lehmann (2004), "Reactance to Recommendations: When Unsolicited Advice Yields Contrary Responses," *Marketing Science*, 23 (1), 82–94.
- Friedman, Howard S., Joan S. Tucker, Joseph E. Schwartz, Carol Tomlinson-Keasey, Leslie R. Martin, Deborah L. Wingard, and Michael H. Criqui (1995), "Psychosocial and Behavioral Predictors of Longevity: The Aging and Death of the 'Termites,'" *American Psychologist*, 50 (2), 69–78.
- Gao, Leilei, S. Christian Wheeler, and Baba Shiv (2009), "The 'Shaken Self': Product Choices as a Means of Restoring Self-View Confidence," *Journal of Consumer Research*, 36 (1), 29–38.
- Heine, Steven J., Darrin R. Lehman, Hazel Rose Markus, and Shinobu Kitayama (1999), "Is There a Universal Need for Positive Self-Regard?" *Psychological Review*, 106 (4), 766–94.
- Higgins, E. Tory (1996), "The 'Self Digest': Self-Knowledge Serving Self-Regulatory Functions," *Journal of Personality and Social Psychology*, 71 (6), 1062–1083.
- Holland, Rob W., Ute-Regina Roeder, Rick B. van Baaren, Aafje C. Brandt, and Bettina Hannover (2004), "Don't Stand So Close to Me: The Effects of Self-Construal on Interpersonal Closeness," *Psychological Science*, 15 (4), 237–42.
- Hong, Sung-Mook and Salvatora Faedda (1996), "Refinement of the Hong Psychological Reactance Scale," *Educational and Psychological Measurement*, 56 (1), 173–82.
- Lindsey, Lisa L. (2005), "Anticipated Guilt as Behavioral Motivation," *Human Communication Research*, 31 (4), 453–81.
- Markus, Hazel Rose and Shinobu Kitayama (1991), "Culture and the Self: Implications for Cognition, Emotion, and Motivation," *Psychological Review*, 98 (2), 224–53.
- , Yukiko Uchida, Heather Omoregie, Sarah S.M. Townsend, and Shinobu Kitayama (2006), "Going for the Gold: Models of Agency in Japanese and American Contexts," *Psychological Science*, 17 (2), 103–112.
- Muller, Dominique, Charles M. Judd, and Vincent Y. Yzerby (2005), "When Moderation Is Mediated and Mediation Is Moderated," *Journal of Personality and Social Psychology*, 89 (6), 852–63.
- Regan, Pamela C., Mark Snyder, and Saul M. Kassin (1995), "Unrealistic Optimism: Self-Enhancement or Person Positivity," *Personality and Social Psychology Bulletin*, 21 (10), 1073–82.
- 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, M.P. Zanna, ed. New York: Academic Press, 209–269.
- Singelis, Theodore M. (1994), "The Measurement of Independent and Interdependent Self-Construals," *Personality and Social Psychology Bulletin*, 20 (5), 580–91.
- Stapel, Diederik A. and Willem Koomen (2001), "I, We, and the Effects of Others on Me: How Self-Construal Level Moderates Social Comparison Effects," *Journal of Personality and Social Psychology*, 80 (5), 766–81.
- Strube, Michael J. and Laurie A. Roemmele (1985), "Self-Enhancement, Self-Assessment, and Self-Evaluative Task Choice," *Journal of Personality and Social Psychology*, 49 (4), 981–93.
- Swann, William B. and Stephen J. Read (1981), "Acquiring Self-Knowledge: The Search for Feedback that Fits," *Journal of Personality and Social Psychology*, 41 (6), 1119–28.
- Trope, Yaacov (1975), "Seeking Information About One's Own Ability as a Determinant of Choice Among Tasks," *Journal of Personality and Social Psychology*, 32 (6), 1004–1013.
- (1980), "Self-Assessment, Self-Enhancement, and Task Preference," *Journal of Experimental Social Psychology*, 16 (2), 116–29.
- Wicklund, Robert A. (1974), *Freedom and Reactance*. New York: John Wiley & Sons.
- Williams, Jane R. and Michael A. Johnson (2000), "Self-Supervisor Agreement: The Influence of Feedback Seeking on the Relationship Between Self and Supervisor Ratings of Performance," *Journal of Applied Social Psychology*, 30 (2), 275–92.