

Do Consumers Know What They Will Like?

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Psychological hedonism is defined by Webster as "the theory that conduct is fundamentally motivated by the pursuit of pleasure or the avoidance of pain." Hedonism may not be the sole motivation, but most of us would agree that the pursuit of pleasure or avoidance of pain is, rightfully, an important aspect of product choice. We borrow the term "hedonics" from the Greek to refer very broadly to the study of pleasure and pain, liking and disliking, enjoyment, taste, disgust, and other such affective responses, and to specifically exclude social, moral, and ethical considerations in decision making.

Do people know how much they will enjoy an experience or product when they make a choice? Rational decision making requires that while I am shopping for groceries I can judge not only the objective attributes of the Grade A filet mignon but also can judge my own enjoyment of steak vs. chicken later in the week when it will be consumed (March 1978). How much I am willing to spend (in money or vacation time) to stay a second week in Hawaii will depend in part on my expectations about whether I will enjoy the second week of sailing and sunning more or less than the first. Marketers often study expectations about product attributes, but seldom do we study people's anticipation of their own responses to those attributes. Whenever tastes change or vary over time and choice is separated from consumption, then anticipation of our own liking or tastes and how they change as a function of experience, time, or the situation, is an important aspect of decision making.

DO PEOPLE KNOW THEIR OWN TASTES?

Our positivist heritage has led us to use choice as a measure of utility: Whatever a person chooses reflects a maximization of his or her own utility function. We assume, rather than test, that people choose what is most enjoyable for them, that is, we assume people know their own tastes. But do they? Kahneman and Snell (1992) tested people's self-insight when predicting a changing taste. In a series of experiments participants were given a sample experience, a serving of ice cream or a taste of plain yogurt and a short musical piece, either self-chosen or experimenter-chosen. They were asked to commit to a week of daily repetition of the experience, to rate their current liking for the product(s) and to predict their own liking at the end of the week. The ice cream and unfamiliar music group came to the lab each day to participate, the yogurt and familiar music group committed to eat and listen at home, at the same time each day.

The norm among subjects was to predict satiation over the course of a week, and on average, for all the products except yogurt, satiation is what actually occurred. Yogurt provides the most interesting example, since most subjects were wrong in predicting even the direction of change. Most participants either predicted satiation as usual (50%) or no change (23%), though most (61%) liked plain yogurt more (or disliked it less) at the end of the week than at the beginning. Perhaps equally as surprising, most were substantially wrong in predicting their liking for their first serving (6 oz.) at home based on their liking for an initial taste (a teaspoon) in the lab (mean predicted = -0.62, mean actual = -2.13 on a 13 point scale).

For the other products, where on average satiation did occur, subjects displayed no self-insight regarding how much satiation would occur. Even the few individuals who did not experience actual satiation generally had predicted satiation. Correlations

between the predicted and actual liking on day 8 for ice cream was -0.14 and for unfamiliar music was 0.24 ($n=16$, n.s. for both). As might be expected participants did show somewhat more self-insight when making predictions for listening to their own choice of favorite music at home for a week ($r=.41$, $n=76$, $p<.01$), but still expected more satiation than actually occurred (mean predicted change = -1.92, mean actual change = -0.79)

INTUITIVE HEDONICS

The preceding studies suggest that people do anticipate changing tastes, and perhaps suggest a bias toward expecting satiation. Snell, Gibbs and Varey (forthcoming) investigated individuals' intuitive knowledge regarding influences on taste, what we might loosely call lay theories of taste change. We use the term "intuitive hedonics" to focus on that part of common-sense psychology regarding the dynamics of pleasure. Using McCloskey's (1983) and diSessa's (1983, 1985) work in intuitive physics as a model, the approach we used was to infer the beliefs people use by analyzing their responses to hypothetical, every-day-life situations. We designed scenarios to describe situations that were natural yet similar to the experimental situations in six areas of psychology that bear on liking or enjoyment: classical conditioning, Weber's law, opponent processes, adaptation (also called habituation), mere exposure, and cognitive dissonance. We adopted this approach because we were more interested in the concepts that people *use* than those they simply espouse. For example, people may claim both "absence makes the heart grow fonder" and "out of sight out of mind", so that asking them to predict the outcome of several specific situations would tell more about their beliefs than asking directly for those beliefs.

In one set of surveys, respondents were asked which of two individuals, who were described as being identical in every way except those mentioned, felt more or less pleasure, was more or less irritated, etc. For example:

D. and J. both live close to a major highway. The noise from the highway is sufficient to be annoying to a weekend visitor, and the noise level is the same for D. and J. The section passing D.'s house was opened a year ago. The section passing J.'s house was opened last week. D. and J. are now each dining at home. Who is more annoyed by the noise?

In order to test for generality, at least three scenarios with different contexts were posed for each concept, and to test for robustness of the intuition, an alternate version of the questionnaire reversed the question, e.g. "Who is less annoyed by the noise?" (d'Arcais 1970).

Classical Conditioning and Weber's Law

In our scenarios designed to test intuitions of classical conditioning and Weber's Law, respondents generally responded consistently with those concepts. For example respondents believe a jingle associated with Saturday football games would be more liked than the same jingle associated with a disliked job ($P=95\%$, $n=43$, $p<.00001$), and that a person with less money before the lottery would be happier at winning \$100 ($P=91\%$, $n=43$, $p<.00001$). For the Weber's Law questions respondents appear to use a number of mental accounts as the baseline for Weber's Law, rather than total wealth (see Kahneman and Tversky 1984; Thaler 1985).

Opponent Processes

Opponent process theory (Solomon 1980) states that the initial emotional response to a stimulus does not simply fade, but diminishes as the result of a counter-acting, or opponent, process. Adaptation occurs as, with repetition, the secondary process grows in size and duration so that it more effectively counteracts the initial process. In addition, as the secondary process grows and the primary process diminishes in effect, the secondary process itself becomes apparent ("rebound").

Our respondents clearly believe in adaptation of the primary process. Even for parachute jumping, the situation for which we expect our respondents to be least experienced, the expectation was for diminishing fear, the primary response, with increasing experience ($P=97\%$, $n=55$, $p<.00001$). It is less clear whether they believe in a growing, and increasingly apparent secondary process. Our respondents thought an experienced individual would feel better or be happier in the afternoon, after morning exercise ($P=74\%$, $n=43$, $p<.001$) or after an electric shock ($P=93\%$, $n=43$, $p<.00001$), than would a novice. This is consistent with opponent process theory, and may well reflect belief in a specific opponent process for exercise, since release of endorphins with exercise has been a popular topic in general interest magazines. For electric shock this result is more surprising, and while it may reflect a belief in a secondary process, it may also reflect a belief that the novice is still suffering pain, or some other lingering primary response, to the shock. We are inclined to believe the later, since for a variety of other scenarios, including cold showers, hot saunas, and one version of the parachute scenario, respondents were evenly split over which character would be in a better mood later in the day. In a third version of the parachute question a majority of respondents *disagreed* with opponent process theory ($P=90\%$, $n=74$, $p<.00001$).

Adaptation

Coombs and Avrunin (1977) suggest that we adapt to desirable outcomes, but that "bads escalate." Gibbs (1992) also found that subjects expected sensitization to a repeated aversive gustatory stimulus that they expected to actually taste. However, our survey results for scenarios involving a diminishing primary opponent process suggest that subjects expected adaptation even for unpleasant experiences. We were curious about the generality of beliefs in adaptation, and explored beliefs in adaptation further, especially in the realm of negative experiences. Our scenarios were inspired by research on adaptation to noise (Weinstein 1982), ice water (Hilgard et al. 1974), a low salt diet (Beauchamps, Bertino and Engelman 1983) and life as a lottery winner or paraplegic (Brickman, Coates, and Janoff-Bulman 1978). We were able to create scenarios for which people believed sensitization rather than adaptation to noise occurs, but generally people believed in more adaptation to noise, especially highway noise, than research suggests actually occurs. For example, even with a highway as close as 30 feet from one's window, 98% of respondents expressed a belief in adaptation ($n=43$, $p<.00001$). Weinstein (1982), whose subjects also expected adaptation, found that those subjects did not in fact adapt to highway noise. Our respondents were quite divided regarding whether one adapts to a low salt or low sugar diet, and were swayed one direction or the other by relatively small changes in the way the scenario or the question was worded. They did not know whether one adapts while having one's hand in ice water (one doesn't; put your hand in a bucket of ice water and see). However, they did not believe one adapts to life as a lottery winner or paraplegic ($P=25\%$ and 22% , $n=74$, $p<.00001$ for each). For more on beliefs about adaptation to extreme and/or bad events see Snell, Gibbs, and Varey (forthcoming) and Varey and Kahneman (1992). In summary,

though it is possible to describe situations in which people do not believe adaptation will occur, it seems that adaptation is a very broadly applied intuitive concept, and that people do not have a very clear sense of its boundary conditions¹.

Exposure

It has been suggested that simple exposure, in and of itself, to a stimulus that is initially both novel and neutral, results in increasing liking. Zajonc (1968) labeled this effect "mere exposure". Most respondents appear to believe that liking increases with exposure for some stimuli or under some conditions, but not for others. Most responses for scenarios involving language or music were consistent with a mere exposure effect, e.g. for a scenario involving exposure to Thai music, 88% answered consistently with mere exposure theory ($n=43$, $p<.00001$). However, responses to questions involving abstract logos varied depending on the wording of the scenario or the question. Though some respondents may hold a generalized concept similar to mere exposure we speculate that other beliefs are at work here, perhaps involving inferences about learning, particularly for stimuli others are known to like (Schindler, Holbrook, and Greenleaf 1989).

Cognitive Dissonance

Cognitive Dissonance is the concept we feel most confident in asserting respondents did not use. The theory of cognitive dissonance (Festinger 1957) holds that inconsistency among cognitive elements (knowledge about one's world and self) creates a drive-like state of dissonance, which people are motivated to reduce. To accomplish this reduction, cognitive elements are modified to become more internally consistent. The standard method of operationalizing cognitive dissonance in the psychological literature is to manipulate justification, and our scenarios compared an individual who was paid or received course credit with one who did not. Respondents were evenly divided in their beliefs regarding whether a person being paid would be hungrier in a fast, or like to eat grasshoppers more, than a person not being paid. A majority did agree that ($P=67\%$, $n=41$, $p<.01$) a student writing an essay justifying terrorism would be more likely to justify terrorism to friends outside of class if she or he did not receive a grade for the paper. Even this agreement was not robust, however: respondents were evenly divided in their beliefs on another version of the questionnaire which turned the question around to ask about which character was *less* likely to explain the terrorists point of view outside of class.

Summary

In summary, our respondents showed a consistent and robust use of concepts similar to classical conditioning and Weber's Law, and they probably use the concept of adaptation rather more liberally than is justified by experimental evidence, though in a few cases they don't apply it when probably they should. They probably do not believe in concepts of opponent processes and mere exposure, at least not as they are proposed in the academic literature. They do not use a concept of cognitive dissonance as it is defined by academics.

DISCUSSION

How do people predict their own liking in the future? We speculate that people may use current liking as a starting point, or anchor, and adjust the starting point according to relevant theories

¹We might add that, after reviewing the literature, it is not clear to us whether researchers understand the boundaries either.

they hold about changes due to time, experience, or the situation. Other anchoring and adjustment studies have shown that people have difficulty accurately modifying the starting point (Tversky and Kahneman 1974; Wilson and Brekke 1994). Evidence consistent with a model of anchoring on current likes has also been found by Snell (1994) for self-prediction of liking. She shows that predictions for future liking of whole categories of foods can be influenced by satiation or temptation for a particular food in the same or a similar category, and that predictions for liking movies can be influenced by mood relevant, but product irrelevant, television ads.

How people predict their own future likes or tastes is an issue that deserves further study. If, as these preliminary studies suggest, people make predictable misjudgments, have ill formed theories of change, or don't understand when the theories apply, there may be much that we as academics or marketers could do to help. For example, it is likely that people would be more willing to change their diets if they fully believed they would shortly come to enjoy the new diet as much as their current one. On the other hand, there might be much greater neighborhood resistance to freeway construction if there were less expectation of adaptation to the noise.

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