How Feelings of Envy Promote Innovation Adoption

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Three experiments show that when consumers experience envy, they are more likely to adopt innovation in order to repair their threatened self-concept. This tendency is especially pronounced among consumers who attend to their feelings, as they experience envy more intensely and are thus more motivated to alleviate these negative feelings.

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**Influence of Emotional and Cognitive Factors on Consumer Well-being**

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**Paper #1: Feeling Empty? Comfort-seeking and finding Meaning through Consumption**

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**Paper #2: How Feelings of Envy Promote Innovation Adoption**

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**Paper #3: Motivated Hypochondriacs: Disease Labels Shape Health Perceptions**

Chiara Longoni, New York University, USA

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**Paper #4: Discussant**

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**SESSION OVERVIEW**

Important for both consumers and the society as a whole (Richins and Dawson 1992; Mazur 1964; Pancer 2009), the subject of consumer well-being has recently received a lot of attention from researchers across disciplines. In particular, researchers have sought to understand different factors that might promote or hinder consumer well-being (Mick, 2008) in various domains, such as risk perception and financial decision making (Thompson 2005; Bernthal, Crockett, and Rose 2005; Henry 2005), substance abuse (Bolton et al. 2008), food choices (Khare and Inman 2006; Wansink and van Ittersum 2003; Pechmann and Knight 2002), and health care (Wong and King 2008; Yan and Sengupta 2013). This session contributes to this area of research by presenting three papers and a follow-up discussion that explore three antecedents of well-being: meaningfulness, innovation adoption, and product-label perception.

Together, the papers in this special session will discuss novel yet influential affective and cognitive factors that impact consumer well-being across several domains. These papers collectively serve to (a) further clarify the role of these factors in affecting well-being; and (b) illustrate different ways of mitigating or eliminating these effects. Understanding these factors is important in facilitating consumers' information processing and decision making, and, ultimately, improving their psychological and physical well-being. The session will close with a general audience discussion led by Leonard Lee, who is known for his work in the domain of affect and its impact on consumer welfare. We expect this special session to attract a wide ACR audience, in particular consumer researchers interested in the influence of emotions and cognitions on various dimensions of consumer well-being.

The first paper by Cho and Mehta explores how the feeling of emptiness impacts consumption in various product categories (e.g., food, books) that can subsequently impact their health and well-being in general. This work builds on previous research that suggests that the feeling of emptiness enhances potentially harmful over-consumption. Specifically, the present work starts by understanding the construct of emptiness and its underlying cognitive process. It is found that the feeling of emptiness arises from loss of social connectedness and leads to loss of shared meaning in one’s life. It is then demonstrated that providing an individual with the opportunity to do something meaningful in fact reduces harmful over-consumption that is geared towards comfort seeking. This paper thus suggests meaningfulness as a constructive way to deal with the feeling of emptiness. A set of five studies is presented in support of the authors’ hypotheses.

Building on the session theme of identifying affective factors influencing well-being, the second paper by Chung and Lee examines how another negative emotion—the feeling of envy—can motivate consumers to adopt innovation. Across three experiments, these authors demonstrate that consumers who experience envy adopt innovative products to restore their threatened self-image, and show that this tendency is prominent among those who are more attentive to their feelings.

In contrast with the first two papers, the last paper by Longoni and Menon presents a cognitive factor that influences consumer well-being with respect to health-related decisions. The researchers present a novel interplay between categorization-based biases and self-protection motives that systematically affects health perception and well-being. Four studies illustrate that the mere presence (vs. absence) of a one-word label biases symptom reporting, perceived symptom intensity, and overall health risk assessment. However, decreasing defensiveness when processing health information eliminates such bias.

Drawing upon the findings across these three papers, we will discuss comparative as well as overarching issues pertaining to the antecedents of well-being. For instance, to what extent are cognitive drivers different from emotional antecedents of well-being, and what are their relationships to each other? Under what conditions might one be more motivated to seek indirect compensatory consumption (Cho and Mehta; Chung and Lee) as means to enhance one’s well-being rather than more direct solutions? And, how persistent are these reported phenomena, for instance, would consumers learn over time to correct for the reported label-induced health perception biases (Longoni and Menon)?

Comments and suggestions from the audience will be sought so as to enhance the session’s interactivity and the discussion’s overall quality.

**Feeling Empty? Comfort-seeking and Finding Meaning Through Consumption**

**EXTENDED ABSTRACT**

Feeling of emptiness (FOE) is a vague inner numbness, when individuals do not have a clear idea of what they feel and have no definite experience of their desires or wants (May 1953). Most individuals, at some moment in their lives, experience FOE (Didonna and Gonzalez 2009). However, it has been argued and demonstrated that if such feelings are not dealt with appropriately, it can lead to clinical conditions, such as depression and eating disorders (Blasco-Fontecilla et al. 2012; Delgado-Gomez et al. 2011; Delgado-Gomez et al. 2012).

Despite its significant implications, existing work has been limited to examining a correlational effect between the FOE and food consumption. Not much work, both in consumer behavior and social psychology, has examined larger implications of feeling of emptiness and if and how they can be mitigated. Current work, thus aims to further current understanding of feeling of emptiness by examining the
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driving process behind such feeling, and its impact on consumption behavior in a non-clinical setting.

A review of literature suggests that FOE and the study of it thereof became prominent after World War II and has become one of the primary problems in modern society (May 1953; Cushman 1990). It has been suggested that in post-modern society, people became communally isolated (Rieff 1966; Zaretks 1976) and individualized (Logan 1987; Meyer 1986) and thus more socially disconnected. We propose that this loss of social connectedness underlies the FOE. To test our proposition, in Study 1, we asked 68 participants to recall a time when they felt empty and write about what made them feel that way. A content analysis of the writings indicated that feeling of emptiness indeed arises from loss of social connectedness, for example, loss of a family member (grandparent), divorce of parents, moving to college and having no one around.

Building on the results of study 1 we propose that because FOE, which has been shown to enhance food consumption, arises from loss of social connectedness it should only do so (i.e., lead to increased food consumption) for the people who are high in need for connectedness. Study 2, provided support for our hypothesis by demonstrating moderating effect of need for connectedness on the relationship between feeling of emptiness and increased comfort food consumption (e.g., cookies, donuts, cake). The relationship between FOE and comfort food was moderated by need for connectedness (F(1,51) = 2.99, p < .05). In other words, people high in need for connectedness (M = 4.39) compared to those low in need for connectedness (M = 3.23) showed significantly stronger craving for comfort food.

Next, based on previous research (Cushman 1990; Widiger et al. 1995) we argue that because FOE arises from loss of social connectedness it would induce loss of shared meaning in one's life. Results from study 3, corroborated our proposition by demonstrating that people who were primed with feeling of emptiness (M = 3.71) compared to those who were not (M = 2.63), indicated higher concern about the purpose and meaning of their lives (F(1,52) = 7.053, p < .05) as measured through existential concern measure (Hazel 1984).

It has been argued that people have an innate need to find meaning and significance in their lives (Frankl 1988). Thus, we propose that when coping with FOE, given a choice people will prefer the products that are perceived as meaningful than the ones that are perceived as comfortable. In Study 4, we presented our participants comforting (e.g., 101 Top Funny Jokes, The comic book; Charlie Brown and friends) and meaningful (e.g., Great Dialogues of Plato, Mother Theresa: The inspiring story and lessons of Mother Theresa) books and asked them to indicate their preference between the two under empty versus a control condition. We found that participants who were primed to feel empty (M = 3.94) compared to those who do not (M = 3.37) indicated significantly higher preference for the meaningful books (F(1,42) = 4.62, p < .05).

Building on results of study 4, we further propose that when individuals are reminded of something meaningful they have done it should reduce comfort consumption. That is, presence of meaning in one's life should moderate the relationship between FOE and comfort-consumption. In study 5, in addition to manipulating FOE we also asked our participants to write about a past event that was insignificant in nature (control condition) or when they did something meaningful (meaningful condition). The consumption was measured through actual number of M&M's a participant chose from the bags that were given to them. Analysis revealed a significant interaction (F(1,75) = 4.66, p < .05). Participants in the empty condition but recalled a meaningful past event (M = 12.70) showed significantly lower consumption in M&M's than those in the empty condition and recalled an insignificant daily event (M = 21.53). Participants in a control condition did not show a significant difference by writing tasks. (M = 11.05 and M = 12.92). This result suggests that meaning can halt comfort-seeking induced by feeling of emptiness.

Current research thus elaborates on how feeling of emptiness influences consumption behavior and how it can be dealt with in a desirable way (i.e., seeking meaning in life rather than seeking comfort). In addition, it also provides significant policy implications for consumer welfare.

How Feelings of Envy Promote Innovation Adoption

EXTENDED ABSTRACT

We often compare ourselves with coworkers, friends, and neighbors to assess how well we are doing at the workplace, in school, and in our daily lives. This comparison often makes us realize our own inferiority and relative deprivation, evoking feelings of envy (Ortony, Clore, and Collins 1988) source: "ISI Web of Knowledge", "event-place": "Ortony a; Univ Illinois at Urbana-Champaign", "abstract": "The authors of this volume intend to, first, convince the reader that a cognitive approach to the study of emotions is viable and, second, to analyze the cognitive structure of emotional systems and of specific emotion types. The authors attempted to avoid restrictions of language and cultural specificity. The introductory chapters explain the authors' approach and sketch the outlines of their theory. The next two chapters discuss the central and peripheral factors that affect the intensity of emotion. Chapters five through eight discuss the classification scheme more fully, describing the three major classes of emotions, individual emotion types belonging to each class, and the variables that help to determine their intensity. The final chapter discusses those aspects of emotion the authors intentionally ignored and suggests ways in which Artificial Intelligence could benefit from their theory. The book ends with a summary and a request for empirical research to test the hypotheses it forwards., "language": "ENGLISH", "author": [{"family": "Ortony", "given": "A."}, {"family": "Clore G.", "given": "L."}, {"family": "Collins
}.}, {"family": "A."}]], "issued": {"date-parts": [{"year": 1988}]}, "schema": "https://github.com/citation-style-language/schema/raw/master/csl-citation.json"}

Envious feelings threaten one's self-concept, as we tend to build our self-worth by ascertaining our relative superiority to others (Cohen-Charsh and Mueller 2007).

Prior research has suggested various ways in which people consume products as a means to compensate for their threatened self-concept (e.g., Gao, Wheeler, and Shiv 2009; Rucker and Galinsky 2008). In the present work, we examine how feelings of envy can similarly induce compensatory product consumption, in particular, the adoption of innovative products.

Innovative products are psychologically rewarding as they improve one's lifestyle, allows one to build identity, and provides a chance for one to differentiate oneself from others (Simonson and Nowlis 2000) explaining decisions, and an individual difference, need for uniqueness (NFU). Due to these advantages, individuals can thus construct a positive self-image through innovation adoption (Vandecasteele and Geuens 2010). Accordingly, we propose that individuals who experience feelings of envy are more likely to adopt innovative products to repair their self-concept. Furthermore, we argue that this product preference is more pronounced among individuals who are dispositionally inclined to attend to their feelings. Greater self-focused attention leads these individuals to more intensely experience the negative feelings that arise from the self-other discrepancy (Carver and Scheier 1981; Salovey 1991) which
in turn motivates them more strongly to repair their threatened self-concept (McFarland et al. 2007).

**Experiment 1** was designed to test the basic effect of our hypothesis. To manipulate different degrees of envy, we first asked 103 M-Turk participants to complete a Perceptual Ability Test. Participants were told that the goal of the test was to measure how well they processed visual information, and that people who performed within the top 15% would receive a reward of $10. They then completed a series of tasks such as predicting the number of people in a crowd as shown in a given picture. After completing the tasks, half of the participants (envy condition) read the following message on the screen: “Another M-Turk participant just before you won $10 award! Your score is now entered into our database and your percentile is being calculated...”; the remaining half of the participants (control condition) only read the second half of this message without any mention of another M-Turk worker’s performance. Subsequently, participants in both conditions were told that they did not win the $10 (a pre-test revealed that this method successfully generates different levels of envy, but not other emotions). In a supposedly unrelated second study, all participants read an advertisement for a new product—a multi-function adapter that can be used in over 150 countries—and were asked to rate the product. Finally, all participants responded to the Attention-to-Feelings scale (Salovey et al. 1995). The results showed that envious participants, especially those who dispositionally attended to their feelings, rated the global adapter more positively than non-envious participants (p = .024).

**Experiment 2** conceptually replicated the findings in experiment 1 by using a different method to manipulate envy. M-Turk participants (N = 143) were randomly assigned to one of two conditions. In the envy condition, participants wrote about an individual at their own level whom they envied. In the control condition, participants were simply asked to write about an individual whom they knew (Cohen-Charash 2009). Following this envy manipulation, in a purportedly unrelated study, all participants saw an advertisement for the “Smart Body Analyzer,” a one-step health-tracking scale that measures an individual’s weight, body composition, and heart rate, as well as the air quality of the room. Lastly, participants responded to the Attention-to-Feelings scale as in experiment 1. The results again showed that among participants who were dispositionally inclined to attend to their feelings, those who experienced envy rated the Smart Body Analyzer more positively than those who did not experience envy (p = .008).

Thus far, experiments 1 and 2 consistently demonstrate that consumers, particularly those who are dispositionally inclined to attend to their feelings, are more likely to adopt innovative products when they experience envy. The goal of **Experiment 3** was to test the mechanism that this innovation adoption reflects envious consumers’ desire to repair their threatened self-concept. Specifically, we investigated whether envious individuals, when given a chance to self-affirm (via other means), would no longer show a preference for innovative products. A total of 172 lab participants were randomly assigned to one of four conditions (Envy: yes/no) × (Affirmation: yes/no). As in experiment 2, half of the participants wrote about an individual whom they envied (envy condition) and the remaining half of the participants wrote about a person whom they knew (control condition). After the essay-writing task, half of the participants (affirmation condition) wrote about their most important life value, while the remaining half of the participants described what a typical AAA battery looks like (no-affirmation condition) (Gao, Wheeler, and Shiv 2009)”I am an exciting person”. All participants then evaluated the Smart Body Analyzer and responded to the Attention-to-Feelings scale as in experiment 2. Consistent with our hypothesis, when individuals were not self-affirmed, envious participants who were inclined to attend to their feelings rated the innovative product more positively (p = .001). Importantly, when envious participants were self-affirmed prior to the innovation-evaluation task, they no longer showed such a preference (p = .999).

This research contributes to the literature in several ways. First, it adds to a limited but growing literature that examines how envy, even when incidentally experienced, leads individuals to repair their self-concept through product consumption. Second, our findings highlight the symbolic role that innovative products serve to consumers who seek opportunities to maintain a positive self-concept.

**Motivated Hypochondriacs: Disease Labels Shape Health Perception**

**EXTENDED ABSTRACT**

This research looks at how disease labels might fundamentally alter health perceptions. We propose that disease labels, much like categories, lack precise and discrete membership boundaries: for a stimulus (i.e., a constellation of somatic and affective sensations at a certain point in time) to be assigned to a category (i.e., a certain illness), not all features (i.e., symptoms) need be present. In other words, symptom matching, much like feature matching, should be a flexible process of interpretation rather than exact matching. This results in a certain degree of latitude when attending to, remembering, and attributing somatic and affective states, giving rise to biases in symptom reporting and thereby affecting health perceptions. Furthermore, such disease labeling effect is susceptible to self-serving biases, whereby inaccuracies in risk estimates reflect the interaction of categorization-based errors with defensive mechanisms.

In a series of four studies, we show the following: (a) Disease labels alter symptom reporting and bias health risk estimates; (b) The direction of this bias reflects a self-protection motive: a label signaling (or interpreted as signaling) a mild ailment leads to greater symptom reporting and higher risk estimates compared to a label signaling (or interpreted as signaling) a severe ailment; (c) Reducing defensiveness eliminates this bias; (d) Perceived disease threat partially mediates the effect; (e) Disease labels do not affect risk estimates made for the general population (i.e., base-rates) or for individuals matched for age and gender (further corroborating the motivational nature of the bias); and (f) This bias holds when controlling for incidental affect, well-being, and general health perception.

In Study 1, participants were handed a survey ostensibly assessing the wellness of the university community. Although all versions of the survey described the same medical condition, the disease was labeled as Seasonality, Mild Seasonality, Severe Seasonality, or was not labeled. Participants were asked to report (a) if in the previous month they had experienced any symptoms, and if so which ones, (b) how intensely they had experienced these symptoms, and (c) risk estimates for self and for another person matched for age and gender. As expected, the presence (vs. absence) of a label was associated with higher symptom recognition (p < .001), higher perceived symptom intensity (p < .001), and greater risk estimates (p < .05). Perceived disease severity moderated the effect: symptom reporting, symptom intensity, and risk estimates were higher if the label signaled (or was interpreted as signaling) a mild (vs. severe) ailment (as measured by perceived severity ratings). Finally, labels affected risk estimates for the self (p < .001) but not for others. These effects held when controlling for incidental affect, well-being, and general health perceptions.

In Study 2 and 3 we sought to better understand the phenomenon and identify boundary conditions. We hypothesized that the
biasing effect of disease labels on health perception is due to defensive motives. If so, the effect should disappear when defensiveness is reduced, either because the person affirms alternative self-resources (Study 2), or because one’s sense of perceived control is temporarily shaken (Study 3).

Building on self-affirmation theory (Steele, 1988) and on the role of self-affirmation in reducing perceived invulnerability to health risks (e.g., Sherman, Nelson and Steele 2000), in Study 2 participants were first either allowed to affirm themselves in an important domain or they were not allowed to do so. Participants were then handed a wellness survey containing a description of a medical condition that was either labeled or not labeled. To measure risk estimates, participants rated the likelihood they, as well as an average person of their same age and gender, would contract the disease. As predicted, defensiveness moderated the effect of labels on risk estimates, with the direction of the bias determined by participants’ perception of disease severity ($p = .05$). When participants did not engage in self-affirmation, risk estimates were biased by the presence of a label ($p = .01$). However, when participants’ defensiveness was reduced (because they engaged in self-affirmation), risk estimates were no longer biased by the presence of a label ($p = .93$). Neither self-affirmation nor label affected risk estimates for another person, further corroborating the notion that the phenomenon reflects a self-protection bias.

Study 3 builds on research showing how high perceived control is associated with greater defensiveness and perceptions of invulnerability to negative events (e.g., DeJoy 1989; Harris 1996; Hoorens and Buunk 1993). We reasoned that we could reduce defensiveness and eliminate the biasing effect of labels by inducing perceptions of low control. Participants were first asked to recall and vividly describe an instance in which they felt they had high (vs. low) control, and then handed the same health survey used in Study 2, which contained the label (vs. no label) manipulation and the critical measures of risk. As expected, risk estimates of low-control participants were not biased by the presence of a label ($p = .54$), presumably because low control tempered defensiveness; risk estimates were instead biased by a label when participants recalled an instance of high perceived control ($p = .01$). The direction of the bias was once again determined by participants’ perception of disease severity, and the effect did not apply to risk estimates for others.

Study 4 brings together the previous three studies to gain a better understanding of the process behind the phenomenon. We first manipulated the factor self-affirmation as in Study 2, and then manipulated the factor label. The wellness survey contained measures of risk estimates and an expanded web of measures of perceived disease threat. Bootstrapping analyses revealed that perceived disease threat partially mediated the relationship between label and risk estimates $(LLCI: 0.1137, ULCI: 0.6016)$, and defensiveness moderated the relationship between perceived disease threat and risk estimates ($p = .04$).

This research is important both theoretically and practically. Theoretically, this research elaborates on how health perceptions are formed, and presents a novel effect based on the interplay of categorization and defensive processes. From an applied perspective, this research has substantive implications for social welfare, as both preventive and care-seeking behaviors heavily rely on self-assessment.

**Discussant**

Drawing upon the findings across these three papers, we will discuss comparative as well as overarching issues pertaining to the antecedents of well-being. Comments and suggestions from the audience will be sought so as to enhance the session’s interactivity and the discussion’s overall quality.