



# ASSOCIATION FOR CONSUMER RESEARCH

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## **Consuming With Others: Social Influences on Moment-To-Moment and Retrospective Evaluations of an Experience**

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Two studies examine differences in participants' moment-to-moment and retrospective evaluations of an experience depending on whether they are alone or in the presence of another person. Findings support our hypotheses that joint consumption leads to similar patterns or "coherence" in moment-to-moment evaluations and that greater coherence leads to more positive retrospective evaluations. We trace the emergence of coherence to processes of mimicry and emotional contagion in study 1 by comparing evaluations for pairs of participants who could see each other's expression with pairs who could not see each other, and in study 2 by coding participants' facial expressions and head movements for direct evidence of contagion.

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## SYMPOSIA SUMMARY

### Social Contagion Effects in Marketing

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#### SESSION OVERVIEW

A key goal of consumer research is to better understand how consumers are impacted by interpersonal phenomena. For instance, how might enjoyment of a movie be affected by having a friend watch it with you? Does observing your friend's responses affect your own? How might a shopper be influenced by a salesperson's subtle nonverbal behaviors? These and other social contagion issues have been under-researched in our field. However, emerging research in social psychology demonstrates that social behaviors and emotions are contagious (e.g., Aarts, Gollwitzer and Hassin 2004; Hatfield, Cacioppo and Rapson 1994). We spontaneously yawn when we see others yawn, express sadness when watching sad movies, and adopt regional accents when on vacation. Moreover, social contagion has been linked to important interpersonal consequences. For instance, mimicking others cultivates rapport (Chartrand and Bargh, 1999), and people adopt the emotion associated with the facial expressions or mannerisms that they have mimicked (Neumann and Strack 2000). This session integrates and builds on this literature by elucidating how consumers can be influenced by our nonconscious and unintentional tendency to "catch" from our social surroundings the behaviors and emotions we observe.

This symposium's broad purposes are to illuminate how social contagion research can broaden our understanding of consumer issues, and to advance theory by delineating the affective, cognitive and behavioral processes at play in social contagion effects. In doing so, we identify several new dimensions to social contagion phenomena and add new insights about social influence to the domains of charitable giving, consumption experiences, and self control. Specifically, we will show how the emotions expressed in persuasive charity appeals cause emotion contagion that in turn influences charitable giving (Small and Verrochi). We will also demonstrate how behavioral and emotional contagion lead to a sense of long-run connectedness that predicts evaluations of shared consumption experiences (Ramanathan and McGill). Finally, we will show that disrupting behavioral contagion during an interaction makes the interaction more taxing, which impairs self-control on other tasks (Dalton, Chartrand and Finkel).

#### Contribution

The papers in this session explore consumer issues through the lens of nonconscious behavioral and emotional contagion. To this end, they elucidate: (a) the psychological processes at play, whether cognitive, affective or behavioral, (b) the conditions that facilitate and impede these processes and the boundary conditions thereof; and (c) the prevalence of contagion effects in different domains and across multiple research paradigms.

The paper by Small and Verrochi shows that an important predictor of both the propensity to donate to a charitable cause and the size of the donation is the facial expressions of victims in the charity's persuasive appeals, as consumers nonconsciously catch the emotion conveyed by these facial expressions and different emotions differentially impact donating behavior. Sad expressions evoke sadness and sympathy, which translates into the greatest charitable response. In addition to this direct effect of emotion contagion on sympathetic responses, the authors demonstrate that supplementing a victim's picture with sad information evokes

sadness sufficient to eliminate the social contagion advantage.

The paper by Ramanathan and McGill manipulates whether two people can or cannot observe each other during a consumption experience and explores the effect of behavioral and emotional contagion on evaluations of the experience. Using a continuous joystick measure of ratings of the experience and cross-spectral analyses of the resultant time series, they find that the evaluations of people who can observe each other synchronize over the long run. Moreover, the coherence of peoples' evaluations can be predicted from the amount of facial and behavioral mimicry during the consumption experience. Finally, the authors show that coherence predicts retrospective evaluations of experiences over and above the peak and end affect.

In the final paper by Dalton, Chartrand, and Finkel, behavioral contagion (here, mimicry of an interaction partners' nonverbal behavior) is manipulated rather than measured to explore how an interaction partner is affected by well- or poorly-coordinated nonverbal behavior. The authors find that whether or not interaction partners are coordinated behaviorally can impact success at self-control, an effect that is attributed to schema-violation. According to the authors, schema-consistent patterns of mimicry preserve regulatory resources, while schema-inconsistent patterns of mimicry deplete these resources. Consequently, in most social interactions, the absence of mimicry will make an otherwise-efficient interaction more taxing and thereby impair self-control.

This symposium sheds new light on social contagion processes, an emerging field of inquiry which has previously been neglected in consumer contexts. The papers implicate social contagion processes in consumers' judgments and behaviors, and examine contagion both in terms of emotion expression and nonverbal behaviors. They demonstrate that social contagion processes can influence individuals through affective and cognitive routes and that these effects can manifest in diverse domains of consumer behavior. Moreover, the papers each provide distinct conceptual and methodological contributions, triangulating on the effects of social contagion through innovative manipulations and procedures.

#### EXTENDED ABSTRACTS

##### "The Face of Need: Reactions to Victims' Emotion Expressions"

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Victims are pictured on charity appeals to elicit the emotions thought to engender prosocial behavior. Research on this identifiable victim effect (Small and Loewenstein 2003) and the relative advantage of vivid over pallid information (Nisbett and Ross 1980) supports that notion. Pictures do evoke emotion; however, the emotional response might depend on the nature of the picture. Certain picture attributes might more effectively appeal to sympathy than others.

Facial expression of emotion is an important feature of person pictures. Faces on charity appeals display a variety of emotions. To examine what charities are actually doing, we coded all website homepages of human-need charities rated Exceptional (Four Stars) by a nonprofit charity evaluator, [www.charitynavigator.org](http://www.charitynavigator.org) (N=363). From this set, 284 included a person picture and happiness was the

most common expression on their faces (37.5%). In contrast to expressions of happiness, 8.3% portrayed a person expressing sadness, 9.6% expressed neutral emotion, and the remaining images portrayed more than one victim whose expressions were not matching. This suggests that charity marketers either do not have a common theory about how emotion expressions matter, they simply have not thought about it, or they do not consider it an important determinant of prosocial behavior.

Although there is a large body of research on *experienced* emotion and prosocial behavior (see Carlson and Miller 1987 for a review), we know of no study isolating the impact of emotion *expression* on prosocial behavior. This gap is noteworthy because of the need to understand responsiveness to charity appeals, which often feature photos of victims. Thus this paper's primary contribution is to provide insight about how emotion expressions on a charity appeal influence charitable giving.

Psychological research highlights the critical role that emotion expression plays in interpersonal coordination. According to emotional contagion theory (Hatfield et al. 1993), people express and feel emotions that are similar to and influenced by those of others with whom they are in contact. Emotional contagion has been characterized as a primitive form of empathy. Indeed, research has shown that "catching" another person's feelings by responding to their facial expression happens automatically and outside of awareness.

Our theoretical framework builds upon emotion contagion theory by positing that people catch the feelings expressed in images of victims. Therefore, viewing a sad-faced victim should elicit feelings of sadness and viewing a happy-faced victim should elicit feelings of happiness. It also draws on findings about mood and helping (Carlson and Miller 1987; Clark et al. 1987) and on hot-cold empathy gaps (Van Boven and Loewenstein 2003) to put forward the notion that feeling sad allows for greater empathy with and sympathy for those who suffer. Consistent with this, sad faces should elicit higher levels of sympathy and greater donations than a neutral or happy face. Finally, we posit that because emotional contagion is a primitive and automatic process, it can be overridden by more conscious forms of thought, such as what might be deduced from other information on the same charity appeal. Thus, other information on the appeal could moderate the impact of facial expression. The studies we present test aspects of this framework and demonstrate the mediating role of emotional contagion and the moderating role of other information on prosocial behavior.

The three studies in this paper empirically tested the components of our proposed theory. Study 1 demonstrated that the emotional expression of a victim pictured on a charitable appeal systematically changes both propensity to give and the nominal donation amount, with sad expressions eliciting greater donations than happy or neutral expressions. After we established this phenomenon using actual donations, studies 2 and 3 employed psychological measures of sympathy to elucidate the possible mechanism. Study 2 replicated study 1's results with measured sympathy and demonstrated that participants' emotional states converge with that of the pictured victim, supporting the role of emotional contagion. Study 2 also established that in line with hypothesis 2, participants' reported emotional state mediates the effect of victim emotion expression on sympathy. Finally, study 3 built upon the findings of studies 1 and 2 by examining the moderating role of information through manipulation of an informational component in the appeals. Here we find that when sympathetic information accompanies the picture of a child, the effect of emotion expression disappears. Together, these studies illuminate the process by which photographs of victims can systematically influence sympathy and prosocial behavior.

This research draws attention to a sympathy-generating attribute of charity appeals that has been neglected both in theory and practice. To our knowledge, it is the first attempt in the literature to isolate the impact of emotion expression on prosocial feelings and behavior. In practice, charities usually do not portray victims expressing sadness. Our findings suggest that they should.

#### **"Consuming with Others: Social Influences on Moment-to-Moment and Retrospective Evaluations of an Experience"**

*Suresh Ramanathan, University of Chicago*

*Ann McGill, University of Chicago*

Much of the work on affective experiences has focused on individual consumption and has centered on understanding the relationship between moment-to-moment affect felt by an individual over the course of an experience and the person's overall assessment of the experience (e.g., Fredrickson and Kahneman 1993; Redelmeier and Kahneman 1996). According to this stream of research, global evaluations of the experience can be predicted by two key moments in that experience, namely, the peak and the end affect felt by the consumer. These studies do not however consider what might happen to an individual's liking of the experience if there is someone else present and sharing the same experience.

In this paper, we examine how shared consumption of an experience may alter both the moment-to-moment affective reaction and consumers' overall retrospective evaluations of the experience. We suggest that global evaluations are influenced not just by the individual's own peak or end affective states but also by the degree to which the individual feels connected or entrained with another person sharing the same experience. In our first study, we examine one moderating variable—whether or not people can observe each other's expressions while going through the experience. Participants were either paired or alone while watching a popular comedy show on two adjacent computers. We manipulated observability for the pairs by using a tall or a short partition between the two computers. Online ratings were collected every second via a joystick. A cross-spectral analysis was run on the resultant time series (420 data points per individual), to determine how people move together in their ratings at various frequencies. This measure, called coherence, was found to be higher among people who could observe each other's expressions, suggesting that their ratings covaried with each other over the long run. This coherence, in turn, was found to independently predict the joint evaluations of the experience by both members of the pair, over and above the individuals' own peak and end affect.

In order to understand the processes underlying these effects, we surreptitiously videotaped pairs of participants in a second study while they were evaluating a short humorous video clip. Half the dyads could observe each other's facial expressions and head movements while the other half could not do so. Images from the videotaping were routed through a split screen generator to a digital video recorder that recorded a split screen image for both participants that was subsequently analyzed moment by moment by independent raters. The raters coded for glances initiated by either participant, and the emotional expressions on each face. We then modeled each participant's emotion at a given time  $t$  as a function of the following: a) the content of the program at the given moment, expressed as the average emotion across all individuals except the focal person at that instant, b) the focal person's own past emotions, suitably lagged several time periods, and c) the effect of the other person, captured via three social processes, namely emotional contagion (own unreciprocated look at other's emotion at time  $t-1$ ), impression management/self-presentation (other's unreciprocated look at own emotion at time  $t-1$ ), and empathy/disconnectedness

(reciprocated looks observing matched emotions and mismatched emotions, respectively). We found strong evidence that for pairs who could observe each other, each of these social processes predicted a person's emotions after controlling for own past emotions and program content. Further, these processes also predicted the coherence emerging in the joystick evaluations, which in turn predicted joint retrospective evaluations of the experience.

In sum, our results support and explain a familiar sensation: consuming with others feels different. Watching a movie with a friend produces different moment-to-moment judgments and changes the basis on which the quality of the movie will later be judged. Specifically, our results show that sharing the experience with another person may cause the consumer's moment-to-moment evaluation to become more like that of the other person, though processes of emotional contagion. Further, this shared pattern of judgment emerges in a subtle fashion over a fluid, broad time frame and not over short periods reflecting local agreement in moment-to-moment evaluations.

### **“The Depleted Chameleon: Behavioral Contagion and Self-Regulation”**

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Interaction partners tend to mimic each other's nonverbal behaviors without awareness or intention to do so. But what happens when behavioral mimicry is absent or unexpected in a social interaction? For instance, what if a vacationer fails to adapt to regional variations in socially normative nonverbal behaviors, and stands too close to his interaction partner or speaks too loudly? Or what if a salesperson, overly eager to affiliate, deliberately imitates every behavior of every consumer with whom he interacts? How do these instances of poorly coordinated mimicry impact interaction partners? We propose that whether or not interaction partners are coordinated behaviorally can impact the self-regulatory resources needed for social interaction, which has downstream consequences for an interactant's ability to exert self-regulatory effort on other tasks.

The basic paradigm employed in this research is as follows. A research participant interacts with a research confederate who spends the duration of their interaction engaging in either mimicry or anti-mimicry (i.e., adopting either the same or different physical postures, mannerisms, and gestures as the research participant). The participant then completes a self-control task. In Experiment 1, we show that mimicry and anti-mimicry differentially impact regulatory depletion, whereby participants who are anti-mimicked exhibit less persistence studying for an upcoming test compared to participants who are mimicked. We further show that our mimicry manipulation can account for unique variance even among participants who previously engaged in a depleting affect regulation task. Experiment 2 shifts to the domain of eating behavior and adds a control condition to address whether anti-mimicry is in fact a source of depletion, or whether mimicry might be a source of self-regulatory replenishment. The results of this experiment support the hypothesis that anti-mimicry leads to self-regulatory depletion.

We conjectured that anti-mimicry tends to tax self-regulatory resources more than mimicry because anti-mimicry tends to violate our implicit expectations and social norms for social interactions. If this is true, then both anti-mimicry and mimicry should be capable of depleting individuals depending on the norms for a given interaction. To test this, we compared depletion following same-race interactions versus interracial interactions. We reasoned that schemas for mimicry might differ in same-race versus interracial interactions in the same way that other nonverbal behaviors (such

as standing distance, eye contact, and smiling) tend to differ, and therefore, mimicry could be depleting in interracial interactions. Supporting our hypothesis, anti-mimicry impaired inhibitory control (measured via Stroop Task performance) following same-race interactions and mimicry impaired inhibitory control following interracial interactions. Interestingly, we also found that depletion was dissociated from self-reported liking of the interaction. That is, whereas interracial interactants were more depleting when they were mimicked, they nevertheless enjoyed mimicry more than anti-mimicry.

In a final experiment, the self-regulatory burden of anti-mimicry (in same-race interactions) was examined using a divided attention paradigm. Participants engaged in a signal detection task while simultaneously interacting with a mimicking or anti-mimicking confederate. Consistent with our previous findings, anti-mimicry impaired self-regulatory performance more than mimicry. Moreover, the performance difference between mimicked and anti-mimicked participants emerged almost immediately after the interactions began, suggesting that the self-regulatory costs of schema-inconsistent patterns of mimicry are both significant and immediate.

Using several different measures of self-control and different experimental methods, this research finds that social contagion processes are intimately linked to self-regulatory functioning and can therefore impact successful self-control. We propose that poor self-control in these studies stems from the violation of behavioral schemas relevant to a particular social interaction, and is not related to anti-mimicry *per se*, or to feelings of negativity in anti-mimicry interactions. These findings reveal that nonverbal behaviors so subtle that they are not consciously perceptible can deplete the resources required for successful self-control.

*References available upon request*