The impact of private versus public consumption on variety-seeking behavior

Rebecca K Ratner; Barbara E Kahn

Journal of Consumer Research; Sep 2002; 29, 2; ABI/INFORM Global

pg. 246

The Impact of Private versus Public Consumption on Variety-Seeking Behavior

REBECCA K. RATNER BARBARA E. KAHN*

> Three experiments demonstrate that people incorporate more variety into their consumption decisions when their behavior is subject to public scrutiny. Studies 1 and 2 indicate that consumers expect others to evaluate their decision more favorably if they choose variety and that this sometimes leads individuals to incorporate more variety into their public than private decisions. Results of study 2 confirm predictions that a relevant individual difference variable (self-monitoring) moderates the effects of expected evaluation on variety seeking. The final study demonstrates that pressure to choose variety in public is eliminated when a social cue signals the appropriateness of consuming one's favorites

Suppose that you are planning the itinerary for an upcoming 10-day Hawaiian vacation. Imagine that you have been to this island before and know that you enjoy relaxing on the beach more than the other available activities such as hiking, scuba diving, and mingling with strangers at a hotel-sponsored luau. How much of the trip would you choose to spend on the beach? You are certain that you will be asked by family, friends, and colleagues about the vacation once you return home. Will knowing that your consumption decisions are going to be subject to public scrutiny influence the amount of variety you choose to incorporate into your vacation plans?

Previous research indicates that consumers often choose considerable amounts of variety when allowed to select more than one item from a choice set, even when they are given the option of repeating consumption of favored items (see Kahn [1995, 1998] for a review). In both simultaneous (Read and Loewenstein 1995; Simonson 1990) and sequential choices (Kahn, Ratner, and Kahneman 1997; Ratner, Kahn, and Kahneman 1999), consumers often choose variety even though this requires them to include items they like less than other items they could have chosen. Previous explanations for variety-seeking behaviors focus on factors such as uncertainty about future preferences (Kahn and Lehmann 1991; Pessemier 1978), anticipated or experienced satiation (McAlister 1982; Read and Loewenstein 1995), the belief that no one item provides desired levels of all attrib-

utes (Farquhar and Rao 1976; Huber and Reibstein 1978), the desire for stimulation or novelty (Raju 1980), and keeping oneself open to new options (Corbin 1980; Seale and Rapoport 1997). In addition, a vacation planner may anticipate that his or her own memories of the vacation will be more favorable if the vacation is varied, even if this requires engaging in some less pleasing activities (Ratner et al. 1999). However, none of these explanations speak to whether the observability of an individual's consumption decisions will influence the amount of variety chosen.

The purpose of this article is to explore whether a desire to be evaluated favorably by others can lead consumers to switch away from their favorite item(s) when making repeated choices among a set of hedonic items (e.g., appetizers, candies, songs). We focus here on products in which the evaluation of benefits provided is a matter of taste (i.e., hedonic rather than utilitarian products) and there is not one best-performing option. We hypothesize that individuals will anticipate that a decision to restrict their choices to consumption of their favorite item(s) would make a negative impression on others; others might conclude that they are dull, boring, or narrow-minded. Sampling a variety of items, on the other hand, allows consumers to express to others that they are creative and interesting people who enjoy many different things. We report here the results of an exploratory study and three experiments that support these predictions. We find that people expect others to evaluate a varied set as a more interesting decision and that this sometimes leads consumers to incorporate more variety in public as opposed to private consumption decisions. Further, we find that this effect of public scrutiny on variety seeking is attenuated when a social cue legitimates the decision to stick to one's favorites.

^{*}Rebecca K. Ratner is assistant professor of marketing at the Kenan-Flagler Business School, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599 (ratnerr@bschool.unc.edu). Barbara E. Kahn is Dorothy Silberberg Professor of Marketing at the Wharton School, University of Pennsylvania, Philadelphia, PA 19104 (kahn@wharton.upenn.edu). The authors thank Steve Hoeffler, Jonathan Levav, Nick Lurie, Gal Zauberman, and the JCR editors and reviewers for helpful comments on earlier versions of this manuscript.

INTERPERSONAL INFLUENCES ON VARIETY-SEEKING BEHAVIOR

There are several different ways in which interpersonal influences impact variety-seeking behavior. For example, changing social situations may require an individual to select a variety of items appropriate to the demands of divergent contexts and audiences (McAlister and Pessemier 1982). A consumer shopping for clothes for the new season, therefore, might feel compelled to buy some clothes appropriate for formal situations, others for business meetings, and others for casual weekend outings with friends. Evidence for another type of interpersonal influence on variety-seeking behavior comes from a recent series of studies in which consumers ordering from a menu in a group context chose something other than their favorite item if another group member already selected that item (Ariely and Levay 2000). In that situation, choosing something different from what another person had chosen allowed consumers to get information about additional options as well as to assert their uniqueness.

This research investigates whether the awareness that one's decision will be observed by others induces impression-management concerns that lead individuals to incorporate variety. Consistent with previous theorizing (e.g., Ariely and Levav 2000; Belk 1988; Calder and Burnkrant 1977), we argue that people's expectations of how others will evaluate their decision will impact the consumption choices they make. Although little previous research has investigated whether individuals choose variety to make particular impressions on others, research indicates that people sometimes make decisions other than those they would privately favor when they expect others will form impressions of them based on the decisions made (Asch 1956; Deutsch and Gerard 1955; Diener et al. 1976; Schlenker, Britt, and Pennington 1996).

Research on impression management typically has focused on broad categories of impression-formation goals that people adopt. For example, individuals with a self-promotion goal strive to make the impression that they are competent, whereas individuals with an ingratiation goal aim to make others believe they are likable (e.g., Gordon 1996; Jones and Pittman 1982). Impression-management research generally focuses more on how people go about communicating a desired impression than on the types of impression-management goals that naturally arise in a consumer context (i.e., the experimenter often specifies the desired impression-management goal, as in Tice et al. [1995]). An exception to this is the recent finding that consumers switched away from a favored item that another person chose in order to assert their uniqueness (Ariely and Levav 2000).

In this article, we argue that individuals feel pressure to choose variety when making repeated selections among a set of options—even in the absence of learning anything about what others have selected—because they expect varied behavior to be evaluated favorably by others. Preliminary support for this argument comes from an exploratory study in

which 50 undergraduates listed traits that they thought observers would associate with someone who either did or did not incorporate variety into their life. Each trait was coded by two independent raters as favorable, unfavorable, or neutral. There was high agreement between the two coders (r's > .75) in the number of favorable and unfavorable traits identified. On average (i.e., combining the ratings of the two judges), participants listed more favorable traits (e.g., exciting, fun, open-minded, well-rounded, flexible) for a person who chooses variety (M = 1.73) than for someone who does not (M = .29; t(49) = 9.22, p < .0001). Participants listed more negative traits (e.g., closed-minded, boring, dull, rigid) for a person who does not seek variety (M = 1.76) than one who does (M = .12; t(49) = 8.68, p < .0001). These results indicate that individuals expect others to evaluate more favorably people they perceive to be variety seekers. Therefore, we hypothesize that in the context of an everyday consumer choice,

H1: People expect others to evaluate the decision to choose a variety of items as more favorable than a decision to restrict consumption to fewer options.

What evidence would demonstrate that consumers sometimes feel compelled to switch away from favorites because of how they expect to be perceived by others? A key prediction is that individuals whose choices are subject to public scrutiny will incorporate more variety into their selections than will those whose decisions remain private. We base this hypothesis on previous evidence that individuals conform more to the decisions they expect others to evaluate favorably if they expect others to be aware of their behaviors. Numerous studies (e.g., Asch 1956; Diener 1979; Singer, Brush, and Lublin 1965; Zimbardo 1970) have shown that individuals adhere more to social norms about what constitutes appropriate behavior when their behavior is identifiable than when it is anonymous. For example, research participants engage in more socially desirable behaviors when their behaviors are known to other participants, when they are referred to repeatedly by name, or when they reveal personal information about themselves to other participants. When behaviors are private or anonymous, people's inhibitions against performing deviant behaviors (e.g., acting aggressively) are relaxed. Therefore, we anticipate that because individuals perceive it to be socially desirable not to repeatedly choose their favorite item(s),

H2: People will incorporate more nonfavorite items to obtain greater variety when their decisions are subject to public scrutiny than when decisions are private.

However, there are individual differences in the extent to which people are willing to adapt their behavior to please others (e.g., Bearden, Netemeyer, and Teel 1989; Snyder 1987). For instance, whereas high self-monitors are willing to adapt their behavior to enact clearly defined roles appropriate to different situations, low self-monitors are less willing to put on a show to please those around them, preferring

instead to be true to their own attitudes and values across situations (Snyder 1987; Snyder and Gangestad 1982). These different orientations lead low and high self-monitors to exhibit different behaviors in consumer contexts. For example, in an advertising context, high and low self-monitors differed in what types of appeals were most persuasive: whereas high self-monitors were more sensitive to image-based appeals than rational arguments concerning product quality, low self-monitors were convinced more by rational concerns about how well the product functioned than by image-based appeals (Snyder and DeBono 1985).

We hypothesize that high and low self-monitors will behave differently when confronted with a decision about how much variety to seek in public. Whereas the high self-monitors may choose some of their nonfavorite items in public to indicate that they are interesting and creative people, the low self-monitors should be unlikely to choose items in public that they do not privately like in order to make others think they are more interesting. Indeed, the items that load high on the self-monitoring scale indicate a person who likes to "put on a show to impress or entertain others," which is consistent with the type of person who would be more likely to change behavior to appear interesting to others.

We hypothesize that it will be this desire to appear interesting rather than a heightened desire to make a justifiable or rational decision (Lerner and Tetlock 1999) that will lead high self-monitors to seek more variety in public than in private. Although a desire to appear rational is a goal that could impact some public behaviors of high self-monitors, we believe it will not be clear to these decision makers how much variety others will consider to be most rational. Whereas it seems fairly straightforward that choosing a varied set will signal that one has diverse tastes, it is less clear whether a decision to choose variety will appear more rational to others than a decision to stick with one's favorites, given that others do not know one's utility function.

Therefore, we hypothesize that

H3a: Public pressure to appear interesting will induce more variety seeking among high self-monitors than low self-monitors.

H3b: A desire to appear interesting will induce high self-monitors to choose variety in public more than will a desire to appear rational.

We propose that an additional factor contributing to variety-seeking behavior in public is a mistaken belief on the part of individuals that observers would themselves prefer more variety than the consumers would. There are several reasons why this could occur. If consumers feel pressure to choose variety in public, then people will likely observe considerable variety in the public consumption choices made by others. Further, changing situations also will lead people to observe others engage in variety-seeking behavior: for example, what one chooses to buy at the supermarket depends on the others for whom one is cooking, and what one

chooses to wear depends on the constraints imposed by the situations in which a person finds him- or herself on different days. When one person observes another person's situationally induced variety-seeking behavior, he or she may attribute the variety-seeking behavior to dispositional rather than situational causes, falling prey to the fundamental attribution error (Ross 1977). As a result, people may come to expect that others have a stronger preference for variety than they themselves do. This expectation that others favor variety may induce people to feel even more pressure in public to choose a varied set. Therefore, we make the following prediction:

H4: People expect others to prefer variety to a greater extent than they themselves do.

Finally, we expect that individuals will feel pressure to choose variety in public particularly in situations where there are no other explicit or implicit rules guiding behavior. However, we hypothesize that if a social cue is present indicating that it is acceptable to stick with one's favorite, the perceived pressure to choose variety will be diminished. Previous research indicates that conformity decreases markedly when individuals learn that at least one other person has deviated from a perceived majority (Allen and Levine 1969; Asch 1951). Even if that one person does not express judgments that conform to the participants' own, the mere fact that someone deviated from the norm is sufficient to decrease conformity rates. In the context of this investigation, imagine that a restaurant customer is told by the server that a particular type of appetizer is the server's personal favorite. In this case, the consumer might feel less pressure to choose variety because someone else has indicated that it is appropriate to have a favorite. If people feel pressure in public to choose an assortment as varied as the one they think others would choose, learning that others have a favorite may make them feel comfortable choosing more of their own favorite(s). Therefore, we hypothesize that

H5: A social cue indicating that it is appropriate to have a favorite will decrease the perceived social pressure to choose variety.

We present the results of three experiments to test these hypotheses. Study 1 examines whether individuals choose more variety in public than in private even when this requires them to choose less favorable items. Study 2 investigates the types of impressions individuals think they will make if they choose a varied set and whether the self-monitoring individual difference construct (Snyder 1987) moderates the effects of public scrutiny on variety-seeking behavior. Finally, study 3 examines whether individuals expect others to consume more variety than they themselves do and whether public pressure to choose a varied set is attenuated when a social cue indicates that it is acceptable to have a favorite.

STUDY 1

The goal of study 1 is to test whether participants choose greater variety in public than in private consumption contexts, even though this requires them to choose more of their nonfavorite items. Participants in this study were presented with a five-item choice set and made choices either subject to public scrutiny or in private.

Method

Study 1 used a two-cell (public vs. private) betweenparticipants design. Sixty-five participants completed the experiment as part of a class exercise: Half of the participants were from a southeastern university, and the other half were from a northeastern university. The stimuli and experimental procedure were exactly the same for each group, and participants within each of the two groups were randomly assigned to a condition. There were no significant differences between the groups, nor were there any significant interactions by group, so all data are collapsed across the two subject pools.

In a consumer behavior course, the professor walked into class and told the students that as a treat, she was going to send them home with a bag of candy. The instructor asked if the students were familiar with the five different types of candy (Kit Kat, Snickers, Starburst, Nestle Crunch, and Sweet Tarts). One or two students did not recognize some of the candy types, and those types were fully described. The professor then indicated that because it would be cumbersome if everyone came up to the front of the room to get the candy, she had devised a system where only half of the students would need to come up to the front. She passed out pink and green sheets, in an alternating fashion, such that every person with a pink sheet sat next to a person with a green sheet. She then explained that everyone should mark down which candy he or she wanted. They were all allowed five pieces of candy in total, and they could have any five they wanted. Participants were assured that there were sufficient quantities of each type of candy that everyone could take as many of each type as they wanted, including up to five pieces of any particular kind of candy. The experimenter emphasized this so that students would not feel public pressure to make selections that would leave enough of each type for their classmates. All participants also were asked to rate each type of candy on a 0-100 scale (where 0 ="don't like it at all" and 100 = "like it a lot"). They were told that this information would be used to determine which candy should be distributed in the future.

Participants were told that the students with the pink sheets were to give their sheets containing their selections to the person with a green sheet sitting next to them; the participants with the green sheets would go to the front of the room to fill both their own and their neighbors' selections. All five pieces of candy for each student would be placed in plastic bags that were opaque so only the person collecting the candy would know what was in each bag. Thus, all the green-sheeted participants' candy selections

were completely private (private condition), and the pinksheeted participants' candy selections were known to another student (public condition). When the participants in the private condition went to the front of the class to get the candy, both the pink and green sheets were collected. After everyone had received their candy, the purpose of the exercise was explained to the class.

Results and Discussion

The independent variable in this analysis was whether decisions were to be made in public versus private; the primary dependent measure was how many different types of candy participants chose. As predicted, participants chose significantly fewer types of candy (M=2.67) in the private condition than did participants in the public condition (M=3.31; F(1,63)=8.18, p<.01). The results of this first study therefore provide preliminary support for hypothesis 2, that individuals feel pressure in public to seek variety.

Previous research indicates that consumers sometimes switch away from favorites to less-preferred items before they have satiated on their favorites (Kahn et al. 1997; Ratner et al. 1999). In order to determine how deep into their choice sets respondents were willing to go in the public versus private conditions, we computed each participant's personal rank orderings of the items they chose. We ranked their top-rated item a 1, their second-most-preferred item a 2, and so on, up to their least-preferred item, which we ranked as 5. In the case of a tie, one item was randomly assigned to be one rank. and the other to be the next lower rank. We then subjected the data to a conditional multinominal logit analysis where we modeled the probability of choosing each of the candies in their choice set as a function of the preference ranking of the candy (i.e., their favorite, their second favorite, etc.), the observability manipulation, and the interaction of those two variables and a series of 64 respondent-specific effect codes. Following hypothesis 2, we predicted that respondents would be more likely to choose deeper into their choice set (i.e., choose less-preferred, higher-numbered items) when decisions were made in public as opposed to private. This hypothesis was supported by a significant observability × rank interaction ($\chi^2(1) = 19.37$, p < .0001). In the public condition, the beta estimate for rank was virtually zero $(\beta = -.06)$, whereas in the private condition, the beta estimate for rank was significantly higher ($\beta = -.46$), indicating that the higher the number of the item (i.e., the lower the preference ranking), the less likely the respondent was to choose that item.

We also ran a simplified analysis of the interaction of preference ranking and our observability manipulation. In

For the ease of collecting the data within a classroom setting, all participants with green sheets were instructed to be order-getters (private), and all participants with pink sheets were instructed to hand their sheets to another student (public). We do not expect that color had a systematic effect on variety-seeking behavior, and this expectation is bolstered by the fact that we obtained similar effects of the public-private manipulations that were operationalized differently in the later experiments.

this analysis, we recoded the respondents' preference ordering to consider a top box/bottom box type of analysis as is frequently found in satisfaction studies (Hurley 1998). Here we coded a choice of either their most-preferred or second-most-preferred items as a top-box choice and the others as a bottom-box choice. We then subjected these data to a binary logit analysis where we modeled the probability of choosing an item in the bottom box as a function of the public or private manipulation. The observability manipulation was again significant ($\chi^2(1) = 12.28$, p < .001). In the public condition, 62% of the choices were in the bottom box, whereas in the private condition, 42% of the choices were in the bottom box.

In summary, the results of study 1 show that individuals choose more variety in public than in private, even if this requires them to choose some items that they like less than others they could have chosen. In the following studies, we use other manipulations of the private versus public aspects of the decisions to ensure that the increased variety seeking found in public in this study was due to our predicted mechanism (i.e., a desire to make a favorable impression on others) rather than some other factor (e.g., increased accountability in public to make a rational choice or a desire for people in the private conditions to choose less variety to simplify their order-getting task).

STUDY 2

There are two primary objectives of study 2. First, this experiment investigates whether people anticipate that choosing a varied set will make favorable impressions on others (hypothesis 1). The results of the exploratory study reported earlier indicate that people expect others to infer more favorable traits of individuals who incorporate variety in their lives. However, it is important to provide additional evidence that individuals expect others to evaluate even a mundane consumption decision more favorably if it incorporates variety. Further, one could argue that the directquestioning method of the exploratory study was heavyhanded; therefore, we aim here to determine whether more subtle measures will reveal consumers' beliefs that variety will be evaluated favorably by others. This study investigates how people expect others to evaluate their selections on a number of different dimensions as a function of how much variety they incorporated. This will allow us to learn more precisely what impressions individuals think varietyseeking behavior will convey.

Second, this experiment seeks further evidence for the impact of impression-management concerns on variety-seeking behavior by testing for the moderating role of a relevant individual difference variable: Snyder's self-monitoring construct (see Snyder [1987] for a detailed discussion of this construct). We hypothesize that, in public, high self-monitors will more often switch away from favorite items than low self-monitors because high-self monitors want to signal that they are interesting and open-minded people (hypothesis 3a). Further, this study tests the hypothesis that it is a desire to appear interesting rather than a desire to appear

rational that leads high self-monitors to choose variety in public (hypothesis 3b).

This second study includes an experimental manipulation of the type of evaluation observers will be making about participants' decisions. The study includes two different public conditions (in addition to a private condition, as before). In both of the public conditions, participants are told prior to making their choices that the sheet containing their selections will be shown to another participant in their experimental session. Participants either are told that this other person will evaluate how interesting their decision was or how rational their decision was.

Method

Study 2 used a 3 (evaluation condition: private vs. evaluation-interesting vs. evaluation-rational) × 2 (self-monitoring: low vs. high) between-participants design. Whereas evaluation condition was manipulated experimentally, self-monitoring was measured to classify participants as low and high self-monitors. One hundred and fifty undergraduates participated in the experiment to fulfill research participation credit in an introductory marketing course.

Participants completed this study as part of an hour-long experimental session in groups of three to eight participants. Participants were told that they each would be choosing a total of five pieces of candy to take home with them. Participants were randomly assigned to one of the three experimental conditions: a private condition in which participants were told that their decision would not be shown to anyone else, and two public conditions, in which participants were told that they would be showing their decisions to someone else who would evaluate their choices. Participants in the evaluation-interesting condition read that the other person would evaluate how interesting their decision was. Participants in the evaluation-rational condition read that the other person would evaluate how rational their decision was.

After these procedures were explained to the participants, they were asked to choose a total of five pieces of candy from the following options: Tootsie Roll, butterscotch hard candy, Smarties, Bazooka Bubble Gum, and Starlight Mint. They were told they could choose any combination of the five candy types; as before, they were assured that they could take as many as they wanted (including up to five pieces) of any type of candy. After making their choices, participants in the two public conditions were asked how they thought the other participant would rate their decision on a series of seven-point semantic-differential scales (favorable-unfavorable, bad-good, not interesting-interesting, rational-irrational, innovativenot innovative, not creative-creative, risk seeking-not risk seeking, not sensible-sensible). These eight semantic-differential items were selected to indicate how participants would expect others to evaluate their decision on a number of different dimensions, including how interesting and rational they would rate the decision.

Next, all participants completed the same semanticdifferential scales to indicate how they would evaluate someone else's choices if the person chose "one of each type of candy" and "all the same type of candy." The order in which we asked these two questions was counterbalanced across subjects. Finally, after all choices and evaluations were completed, all participants indicated how much they liked each of the types of candies (on seven-point scales where 1 = "do not like it at all" and 7 = "like it very much").

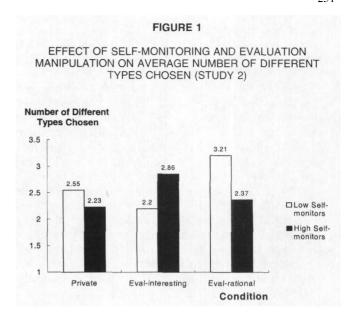
All participants then completed a filler task consisting of several unrelated questionnaires before completing the 18-item version of the self-monitoring scale (Snyder 1987). The scale includes items such as "I guess I put on a show to impress or entertain others" and "I have considered being an entertainer," to which participants respond either "True" or "False." Participants then completed the remaining materials in the hour-long set of studies before being fully debriefed.

Results

Self-Monitoring Scale. Participants received one point for each item they endorsed in the high self-monitoring direction (e.g., indicating that they do put on a show to impress or entertain others). For eight items, a response of "True" was the high self-monitoring response; for the remaining 10 items, a response of "False" was the high selfmonitoring response. Points obtained across all items on the scale were summed to obtain each participant's selfmonitoring score. As recommended by Snyder (1987, p. 181), participants with scores of 10 or below were classified as low self-monitors, and participants with scores of 11 and higher were classified as high self-monitors. This resulted in classifying 59 participants as low self-monitors and 89 as high self-monitors (two participants were not classified as either high or low self-monitors because of missing data). Cronbach's alpha for the 18-item scale was .71.

Effects on Amount of Variety Chosen. An ANOVA was performed to test the effects of evaluation condition and self-monitoring on amount of variety chosen (see fig. 1). No main effect of self-monitoring was predicted or obtained. The main effect of evaluation-condition was directionally consistent with hypothesis 2 (M's = 2.35, 2.58, and 2.69 in the private, evaluation-interesting, and evaluation-rational conditions, respectively; F(2, 142) = 2.41, p < .10). However, the key result of this study is that the predicted self-monitoring × evaluation-condition interaction was obtained (F(2, 142) = 8.36, p < .0001). This interaction result was essentially the same when self-monitoring was treated as a continuous variable (F(2, 142) = 4.84, p < .01).

Planned contrasts revealed that the high self-monitors chose a significantly greater number of candy types when told that others would be evaluating how interesting their decision was (M = 2.86) than when their decision would remain private



(M = 2.23; F(1.142) = 7.23, p < .01). However, as predicted, a different pattern of results emerged for the low selfmonitors. The low self-monitors chose no more variety when instructed to make an interesting decision (M = 2.22) than when making a private decision (M = 2.55; F(1, 142) =1.52, NS). Consistent with hypothesis 3a, high self-monitors chose more variety than did low self-monitors when told that others would evaluate how interesting their decision was (F(1, 142) = 6.22, p < .05). Consistent with hypothesis 3b, high self-monitors did not choose more variety when told that others would be evaluating how rational their decision was (M = 2.37) than when they expected their decision to remain private (M = 2.23; F < 1). Finally, results indicated that the low self-monitors chose more variety when instructed to make a rational decision (M = 3.21) than when making a private decision (M = 2.55; F(1, 142) = 5.25, p < .05). We will consider possible explanations for this unhypothesized result in the discussion section.

Evaluations of Variety-Seeking Behaviors. Next, we examined how participants in the two public conditions expected their responses to be evaluated depending on how much variety they chose. After making their decision, each participant had been asked to complete eight semanticdifferential ratings indicating how they expected others to rate their decision. We averaged the two items indicating how favorable and good participants expected others to perceive their decision to be (r = .83, p < .01). For each of the seven evaluative dimensions (favorable/good, interesting, rational, innovative, creative, risk seeking, and sensible), we computed correlations between the amount of variety chosen and the participant's expectation of how the decision would be judged on that dimension. The correlations among the low self-monitors did not differ from those among the high self-monitors, nor did the correlations differ

²An ANOVA using a median split on the other-directedness subscale of the self-monitoring scale (to block participants into low and high otherdirectedness groups) yielded similar results, supporting our claim that participants' desires to conform to the wishes of others influence the amount of variety they choose.

between conditions. This suggests that the differential effects of the evaluation manipulations on the low versus high self-monitors were not due to divergent perceptions of how others would evaluate variety-seeking behavior.

Overall, participants' estimates of how favorable/good others would rate their decision to be were positively related to the number of different types of candy they selected (r(96) = .29, p < .01). The number of different types of candy selected was positively related to how interesting they thought others would consider their decision (r = .20), how creative they expected the decision to be rated (r = .27,p's < .05), and how risk seeking they expected others to rate the decision (r = .20, p = .05). The correlation between number of different types chosen and how innovative they expected the decision to be rated was directionally consistent with hypotheses (r = .18, p = .08). The correlations between the number of different items chosen and how rational (r = .07) and how sensible (r = .15) they expected the decision to be judged were nonsignificant. These correlations provide additional support for our hypothesis 1 about why people choose more variety in public: individuals who choose a greater number of different types of items expect their decision to be evaluated as more favorable, interesting, and creative and possibly also as more innovative and risk seeking. That there was not a systematic relationship between the number of different types chosen and expected rating by others of how rational the decision was is consistent with our expectation that participants would be uncertain as to what choice others would rate as most rational.

Finally, we compared the ratings that all participants gave for another person's (hypothetical) decision to "choose all the same" versus "choose one of each" type of candy. Participants rated the decision to choose one of each item to be more innovative (M = 3.47 vs. 2.85; t(146) = 2.62, p < .05),more creative (M = 3.46 vs. 2.67; t(146) = 3.30, p < .001),and more risk seeking (M = 4.00 vs. 2.73; t(146) = 4.23, p < .0001) than choosing all of the same. Participants' ratings of how interesting the decision would be to choose one of each rather than all the same was directionally consistent with predictions (M = 3.86 vs. 3.56; t(145) = 1.90, p = .06). The ratings of choosing all the same item versus one of each did not differ for the other measures: favorable (overall M = 4.35), good (overall M = 4.53), rational (overall M = 5.14), and sensible (overall M = 4.83). That participants did not rate the choice of one of each more favorably than a choice of all the same suggests that they believe that more variety is better than less (as indicated in the correlations reported in the previous paragraph) but that a good decision does not require people to choose one of each of the different types. Participants seem to believe that it is acceptable to repeat a favorite item at least twice; indeed, their choices in the public conditions reflect this, as they did not choose more than three different types of candy on average.

Discussion

Study 2 provides support for our argument that individuals' tendency to choose more variety in public than in

private reflects impression-management concerns. Consistent with hypothesis 1, participants expected others to evaluate their decision as more interesting and creative the more they incorporated variety into the set. This was indicated by the significant correlations between the number of different types of candies participants chose and their expectations of how others would evaluate the decision. Also consistent with predictions, participants did not expect a systematic relationship between the amount of variety they incorporated and how rational others would judge their selections to be.

The results of this study also supported our hypothesis that the self-monitoring construct would moderate the effects of impression-management concerns on variety-seeking behavior. Consistent with hypothesis 3a, the image-conscious high self-monitors but not the principles-based low self-monitors chose more variety when observers would be judging how interesting their choices were. The results also confirmed our hypothesis 3b that the high self-monitors are driven in public by a desire to present themselves as interesting rather than rational by choosing a diverse set of items.

An intriguing result of this study is that the low but not the high self-monitors chose more variety when told that others would evaluate how rational their decision was. Why might a desire to make rational decisions in public have increased variety seeking among the principled low selfmonitors? Indeed, as Snyder and his colleagues have observed (e.g., Gangestad and Snyder 2000; Schlenker and Pontari 2000; Snyder 1987), low self-monitors may be concerned about maintaining public images as principled people (Gangestad and Snyder 2000, p. 533). Our results are consistent with the idea that some types of impression-management concerns may influence low self-monitors (Mark Snyder, personal communication, February 2001) and suggest that a desire to appear rational may be the type of concern that will lead low self-monitors to adjust their behavior in public. However, neither the high nor the low selfmonitors in this study expected a systematic relationship between the amount of variety they selected and how rational others would judge their decision to be. Therefore, it is likely that the low self-monitors told that others would evaluate how rational their decisions were consulted their own beliefs about what decision would be most sensible. The results suggest that when considering what decision they themselves thought was most rational, the low self-monitors concluded that they should incorporate more variety into the set. The high self-monitors, lacking a clear sense that variety seeking would be perceived by others to be rational, did not change their public behavior in that condition. An interesting question for future research is whether low self-monitors in general will adjust their behavior when told that others will be evaluating their decision on the basis of how rational, principled, or consistent their decisions are.

STUDY 3

The previous two experiments indicate that individuals choose more variety in public than in private to make favorable impressions on others. The first objective of study 3 is to test hypothesis 4, that individuals expect others to have a stronger preference for variety than they themselves do. If so, then one reason that individuals choose more variety in public than in private may be to appear to have as diverse tastes as they think others do. For this reason, we ask participants in this study what decisions they would make, and what decisions they think the typical person in their situation would make, about what items to consume over time.

A second objective of study 3 is to examine whether we can manipulate the social environment in such a way that the pressure to choose variety in public will be diminished. Specifically, we test whether a social cue that makes it appear appropriate to choose one's favorite will attenuate the perceived pressure to choose variety (hypothesis 5). We predict that if another person makes it explicit that he or she has a favorite item, individuals might feel more comfortable choosing to repeatedly consume their own favorite. Our reasoning follows the findings in conformity research that even a single deviant can dramatically lower the extent to which people conform to a social norm (Allen and Levine 1969; Asch 1951). Therefore, we expect that individuals' willingness to conform to the expected variety seeking of their peers will be diminished when they receive the social cue licensing reduced variety seeking regardless of whether their decisions are private or public.

Method

Study 3 used a 2 (observability: private vs. public) \times 2 (cue: none vs. present) between-participants design. One hundred and fifteen undergraduates participated in the experiment as part of a class exercise for their introductory marketing course.

Each experimental session lasted approximately 20 minutes and was conducted entirely on a personal computer. All participants were told that they would be asked to choose 10 appetizers that they thought they would like to eat at a hotel reception. To make this situation easier for participants to visualize, participants were shown photographs of each of the 10 types of appetizers available. Participants in the private condition were told to imagine they were alone; participants in the public condition were told to imagine that they were with an interviewer.³ Participants in the no-cue condition received no information about any of the appetizers, whereas participants in the cue condition were told that the server mentioned which was her favorite appetizer (the stuffed zucchini).

During the choice task, a photograph of each appetizer appeared on the screen, and participants clicked on a small button beneath each appetizer to indicate each of their 10 selections. After making each selection, participants saw a

screen summarizing what they had selected on the previous trials. In addition, all participants indicated which 10 items they thought "a typical person" would choose, if in the same situation.

Results and Discussion

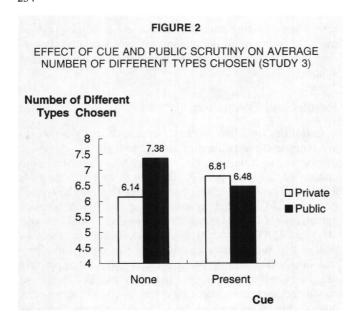
Estimates of Own versus Others' Variety Seeking. We compared the amount of variety participants chose for themselves with the amount of variety they expected in the choices of "a typical person." Consistent with hypothesis 4, a paired t-test revealed that participants thought the typical person would choose a greater number of different types of appetizers (M = 7.63) than they themselves would choose (M = 6.74; t(162) = 5.51, p < .0001). To rule out the possibility that this effect was driven by participants thinking that others like one or two particular types of appetizers (e.g., the healthful ones) more than they themselves do, we conducted analyses comparing own choices to estimates of others' choices for each of the 10 appetizer types. For none of the appetizers did participants think that others, on average, would choose the item more times than participants themselves would.

Looking separately at reports of own versus others' variety seeking in each of the four experimental conditions is illuminating: in the three conditions in which we expected participants to feel most comfortable choosing their favorites, they expected that they would choose less variety than others would (M's for self and other = 6.14 and 7.43 in the private/no-cue condition, 6.81 and 8.03 in the private/cue-present condition, and 6.48 and 7.57 in the public/cue-present condition; all p's < .05). However, participants in the public/no-cue condition, who we expected would feel the greatest conformity pressure, reported that the amount of variety they would choose would not differ from that chosen by their peers (M = 7.38 for self vs. 7.52 for others; t(20) = .33, NS).

Effects on Amount of Variety Chosen. An ANOVA was performed to determine the effects of the public/private manipulation and whether or not the server mentioned having a favorite on the amount of variety chosen (see fig. 2). The main effects were not significant; however, the predicted observability \times cue interaction was obtained (F(1,111) = 4.39, p < .05). Within the no-cue condition, participants chose a greater number of appetizers in the public condition (M = 7.38) than in the private condition (M = 6.14; F(1,111) = 5.31, p < .05). However, when participants were told that the server had a favorite item, the difference between choices made by the participants in the private (M = 6.81) and public (M = 6.48) conditions was not significant (F < 1).

A separate ANOVA was performed to determine effects of the experimental manipulations on participants' choice of the server's favorite item. Not surprisingly, participants chose that item more when they learned it was their server's favorite item than when they did not (M's = 1.03 and .66 in the cue and no-cue conditions, respectively; F(1, 111) = 4.38, p < 1.05

³Previous research indicates that even imagined interactions with others have predictable effects on behavior (e.g., Aaker 1999; Fridlund et al. 1990). For example, imagining attending a business dinner vs. a social outing with friends made accessible different aspects of participants' self-concepts (Aaker 1999).



.05). Participants appear to have inferred from the server's recommendation that this favored product was high quality (Burnkrant and Cousineau 1975; Deutsch and Gerard 1955). It was important to determine whether the key predicted interaction would remain significant after controlling for the number of times participants chose the server's favorite appetizer. To test this, we performed a two-way (observability × cue) ANCOVA on total number of items chosen, controlling for the number of times the participant selected the recommended item. The covariate (i.e., total number of times participants chose the server's favorite item) was a significant predictor of the total number of items chosen (F(1, 110) =8.66, p < .01). However, the predicted interaction remains significant (F(1, 110) = 5.73, p < .05) even when we include the total number of times participants chose the server's favorite in the analysis. Therefore, the reduced tendency to choose variety in public than in private when told a server's favorite item is not simply due to more selections of the server's favorite appetizer. Rather, learning that a server has a favorite item appears to signal to people that it is acceptable to consume repeatedly their own favorite item(s).

In summary, the results of study 3 provide additional evidence for the underlying mechanisms and boundary conditions of this phenomenon. The different pattern of results when choosing for themselves versus for the typical person suggests that people sometimes do overestimate how much variety others want. Therefore, in public people may feel pressure to choose variety in part because they think this is what those observing their behavior would choose for themselves. Further, the results of study 3 indicate that if there is a salient social cue that it is appropriate to have a favorite, consumers will feel less pressure to switch to nonfavorites for the sake of variety. The only condition in this study in which participants appeared pressured into choosing as much variety as they thought their peers would choose was

the public condition in the absence of the social cue licensing individuals to stick with their favorites.

GENERAL DISCUSSION

The results of these three experiments suggest that individuals incorporate more variety in public than in private in order to make a favorable impression on others. As predicted, participants in these studies chose more variety when their decisions were to be observed by their peers, even though this required them to include some nonfavorite items. Refusing to venture beyond one's favorites (in food contexts in these studies) might seem narrow-minded, whereas choosing a varied set allows one to portray oneself as interesting, open-minded, and creative. Indeed, an individual difference in desire to alter one's behavior to fit social situations influenced levels of variety seeking in predicted ways, such that high self-monitors chose more variety than low selfmonitors when trying to make others think they made an interesting (rather than a rational) decision. Further, the findings suggest that one cause of the greater willingness to choose variety in public is consumers' expectations that others prefer varied assortments. Finally, the results of the third study indicate a boundary condition on the perceived pressure to choose variety: if there is a social cue that it is appropriate to stick with one's favorites, the pressure to choose variety in public is attenuated.

We believe these findings are important for several reasons. First, we provide a new explanation to supplement earlier accounts of why individuals switch away from their favorites before they have satiated on them (Kahn et al. 1997; Ratner et al. 1999). Particularly when individuals are concerned about how they are evaluated by others (e.g., in public), they may choose nonfavorite items even though they would derive more enjoyment from sticking with their favorites. These results demonstrate that when consumers know that their decisions will be observed by others, they may be induced to seek more variety than they privately would be inclined to choose. An interesting possibility is that this perceived pressure to choose variety may operate to some extent even when individuals' decisions are private if it allows them to convey something favorable to themselves about what type of person they are (Schlenker et al. 1996).

Consumers' desire to convey that they are interesting people through their choice of variety may contribute to some interesting, previously documented phenomena. For example, the phenomenon we describe may contribute to consumers' tendency to choose more varied sets when making decisions about what to include in a set than when making each decision on separate choice occasions (Simonson 1990; Simonson and Winer 1992). Individuals may believe that the amount of variety they incorporate is more salient to observers when choices are made simultaneously than at separate points in time. These findings also may explain in part why consumers in a group context (e.g., restaurant patrons placing their orders) choose items different from those others have just chosen (Ariely and Levav 2000): consumers

in such contexts may feel public pressure to make an interesting choice by incorporating variety into the set of items ordered.

In addition to its relevance for understanding variety-seeking behavior, this research aims to contribute more generally to the consumer behavior literature by examining social influences on choices over time. Previous research has largely neglected the impact of the public scrutiny on consumers' repeated choices. Typically, research has focused on how consumers make a single decision after learning the preferences or beliefs of others (e.g., Ariely and Levav 2000; Burnkrant and Cousineau 1975; Venketesan 1966). Such experiments follow in the tradition of classic social psychology studies that investigated the extent to which people do or do not conform to the norms created by others' responses (Asch 1951; Sherif 1936).

Rather than examining how consumers respond after learning their peers' reactions, this research documented how consumers alter their choices over time on basis of the reactions they think their peers will have to their behavior. It is important to note that this approach examines social expectations that are collectively shared (Miller and Prentice 1996). Whereas some theories focus on individuals' unique expectations about how those important to them would evaluate their decision (Fishbein and Ajzen 1975), this research documents shared expectations about how others would respond to particular consumption patterns. Thus, this set of experiments documents the influence on consumption decisions of social expectations that (1) appear to be socially shared and (2) operate in the absence of any feedback during the course of the experiment about the attitudes or decisions of another person.

In the psychology literature, research has examined effects of the mere presence of others on individuals' behaviors. Findings based on social facilitation theory indicate that the mere presence of others increases arousal, which improves the performance of dominant, well-learned behaviors but hurts the performance of poorly learned behaviors (Zajonc 1965). In this context, however, it is not clear whether the well-learned response is to choose variety or remain loyal to one's favorites. In addition, the arousal explanation would have difficulty accounting for the differential effects of the impression-management manipulation on low versus high self-monitors in study 2 as well as for the effects of the social cue licensing people to stick with their favorites in study 3. Our results indicate that it is the observability of one's consumption decisions rather than the mere presence of other people that underlies the increased variety seeking in public.

This research suggests several questions for future enquiry. One question is whether perceived social pressure to choose variety emerges across cultures. Do members of collectivistic cultures evaluate variety seeking as favorably as members of individualistic cultures do? It is possible that some (e.g., traditional) cultures endorse sticking with a good thing more than the experimentation that comes with variety seeking. Even within individualistic cultures, there may be

situations in which consumers think that others like only a subset of items within a set and therefore may not feel pressure themselves to incorporate variety. A related question concerns the extent to which perceived social pressure to choose variety generalizes across product categories. All experiments reported here have focused on food; other research showing similar findings of extensive variety-seeking behavior when others are observing their behavior (e.g., Kahn et al. 1997; Ratner et al. 1999) focused on music. In hedonic domains, the choice of variety may be seen as a signal of open-mindedness. However, for product categories where the benefits are primarily utilitarian rather than hedonic and where there is clearly one best-performing product, one may expect that others would evaluate more favorably one's decision to stick with a favorite rather than to switch away from one's favorites for the sake of variety. Recent research (Inman 2001) suggests that consumers are more likely to seek variety on sensory attributes (e.g., flavor) than nonsensory attributes (e.g., brand). For these reasons, public pressure to choose a varied set may be particularly influential in hedonic domains (e.g., food, music) in which people's preferences are a matter of taste.

It is both theoretically and managerially important to understand why consumers switch away from items that they like better than the alternatives. This research investigated whether individuals' expectations about others' reactions to their choices can reduce loyalty to favorite products. The results indicate that greater variety seeking occurs when consumption decisions are public rather than private and that this result is driven at least in part by individuals' expectations that others will evaluate their decision more favorably if they branch out beyond their favorites.

[Received January 2001. Revised January 2002. David Glen Mick served as editor and Frank R. Kardes served as associate editor for this article.]

REFERENCES

Aaker, Jennifer L. (1999), "The Malleable Self: The Role of Self-Expression in Persuasion," *Journal of Marketing Research*, 36 (February), 45–57.

Allen, Vernon and John Levine (1969), "Consensus and Conformity," *Journal of Experimental Social Psychology*, 5 (Fall), 389–399.

Ariely, Dan and Jonathan Levav (2000), "Sequential Choice in Group Settings: Taking the Road Less Traveled and Less Enjoyed," *Journal of Consumer Research*, 27 (December), 279–290.

Asch, Solomon (1951), "Effect of Group Pressure upon the Modification and Distortion of Judgments," in *Group Leadership and Men*, ed. Harold Guetzkow, Pittsburgh: Carnegie Press, 177–190.

——— (1956), "Studies of Independence and Conformity. I. A Minority of One against a Unanimous Majority," *Psychological Monographs*, 70 (9), 1–70.

Bearden, William O., Richard G. Netemeyer, and Jesse E. Teel (1989), "Measurement of Consumer Susceptibility to Interpersonal Influence," *Journal of Consumer Research*, 15 (March), 473–481.

- Belk, Russell W. (1988), "Possessions and the Extended Self," Journal of Consumer Research, 2 (September), 139–168.
- Burnkrant, Robert E. and Alain Cousineau (1975), "Informational and Normative Social Influence in Buyer Behavior," *Journal of Consumer Research*, 2 (December), 206–215.
- Calder, Bobby J. and Robert E. Burnkrant (1977), "Interpersonal Influence on Consumer Behavior: An Attribution Theory Approach," *Journal of Consumer Research*, 4 (June), 29–38.
- Corbin, Ruth M. (1980), "The Secretary Problem as a Model of Choice," *Journal of Mathematical Psychology*, 21 (February), 1–29
- Deutsch, Morton and Harold B. Gerard (1955), "A Study of Normative and Informational Social Influences upon Individual Judgment," *Journal of Abnormal and Social Psychology*, 51 (November), 629–636.
- Diener, Edward (1979), "Deindividuation, Self-Awareness, and Disinhibition," *Journal of Personality and Social Psychology*, 37 (July), 1160–1171.
- Diener, Edward, Scott C. Fraser, Arthur L. Bearman, and Roger T. Kelem (1976), "Effects of Deindividuation Variables on Stealing among Halloween Trick-or-Treaters," *Journal of Personality and Social Psychology*, 33 (February), 178–183.
- Farquhar, Peter H. and Vithala R. Rao (1976), "A Balance Model for Evaluating Subsets of Multiattribute Items," *Management Science*, 5 (January), 528–539.
- Fishbein, Martin and Icek Ajzen (1975), Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research, Reading, MA: Addison-Wesley.
- Fridlund, Alan J., John P. Sabini, Laura E. Hedlund, Julie A. Schaut, Joel I. Shenker, and Matthew J. Knauer (1990), "Audience Effects on Solitary Faces during Imagery: Displaying to the People in Your Head," *Journal of Nonverbal Behavior*, 14 (2), 113–137.
- Gangestad, Steven W. and Mark Snyder (2000), "Self-Monitoring: Appraisal and Reappraisal," *Psychological Bulletin*, 26 (July), 530–555.
- Gordon, Randall A. (1996), "Impact of Ingratiation on Judgments and Evaluations: A Meta-analytic Investigation," *Journal of Personality and Social Psychology*, 71 (July), 54–70.
- Huber, Joel and David J. Reibstein (1978), "The Relationship between Attitude Measures and Choice Frequency," in *Attitude Research Plays for High Stakes*, ed. John C. Maloney, Chicago: American Marketing Association, 148–164.
- Hurley, Robert F. (1998), "Alternative Indexes for Monitoring Customer Perceptions of Service Quality: A Comparative Evaluation in a Retail Context," Academy of Marketing Science, 26 (Summer), 209–221.
- Inman, J. Jeffrey (2001), "The Role of Sensory-Specific Satiety in Attribute-Level Variety Seeking," *Journal of Consumer Research*, 28 (June), 105–120.
- Jones, Edward E. and Thane S. Pittman (1982), "Toward a General Theory of Strategic Self-Presentation," in *Psychological Perspectives on the Self*, Vol. 1, ed. Jerry Suls, Hillsdale, N.J.: Erlbaum, 231–262.
- Kahn, Barbara E. (1995), "Consumer Variety-Seeking among Goods and Services," *Journal of Retailing and Consumer* Services, 2 (Fall), 139–148.
- ——— (1998), "Variety: From the Consumer Perspective," in *Research Advances in Variety Management*, ed. Christopher S. Tang and Teck H. Ho, Boston: Kluwer, 19–37.
- Kahn, Barbara E. and Donald R. Lehmann (1991), "Modeling Choice among Assortments," *Journal of Retailing*, 67 (Fall), 274–299.

- Kahn, Barbara E., Rebecca K. Ratner, and Daniel Kahneman (1997), "Patterns of Hedonic Consumption over Time," *Marketing Letters*, 8 (Spring), 85–96.
- Lerner, Jennifer S. and Philip E. Tetlock (1999), "Accounting for the Effects of Accountability," *Psychological Bulletin*, 125 (March), 255–275.
- McAlister, Leigh (1982), "A Dynamic Attribute Satiation Model of Variety-Seeking Behavior," *Journal of Consumer Research*, 9 (September), 141–150.
- McAlister, Leigh and Edgar Pessemier (1982), "Variety Seeking Behavior: An Interdisciplinary Review," *Journal of Consumer Research*, 9 (December), 311–322.
- Miller, Dale T. and Deborah A. Prentice (1996), "The Construction of Social Norms and Standards," in *Social Psychology: Handbook of Basic Principles*, ed. E. Tory Higgins and Arie W. Kruglanski, New York: Guilford, 799–829.
- Pessemier, Edgar (1978), "Stochastic Properties of Changing Preferences," *American Economic Review*, 68 (May), 380–385.
- Raju, P. S. (1980), "Optimal Stimulation Level: Its Relationships to Personality, Demographics and Exploratory Behavior," *Journal of Consumer Research*, 7 (December), 272–282.
- Ratner, Rebecca. K., Barbara E. Kahn, and Daniel Kahneman (1999), "Choosing Less-Preferred Experiences for the Sake of Variety," *Journal of Consumer Research*, 26 (June), 1–15.
- Read, Daniel and George Loewenstein (1995), "Diversification bias: Explaining the Discrepancy in Variety Seeking between Combined and Separated Choices," *Journal of Experimental Psychology: Applied*, 1 (March), 34–49.
- Ross, Lee (1977), "The Intuitive Psychologist and His Shortcomings: Distortions in the Attribution Process," in *Advances in Experimental Social Psychology*, Vol. 10, ed. Leonard Berkowitz, New York: Academic Press, 174–221.
- Schlenker, Barry R., Thomas W. Britt, and John Pennington (1996), "Impression Regulation and Management: Highlights of a Theory of Self-Identification," in *Handbook of Motivation and Cognition*, Vol. 3, *The Interpersonal Context*, ed. Richard M. Sorrentino and E. Tory Higgins, New York: Guilford, 118–147.
- Schlenker, Barry R. and Beth A. Pontari (2000), "The Strategic Control of Information: Impression Management and Self-Presentation in Daily Life," in *Psychological Perspectives* on Self and Identity, ed. Abraham Tesser, Richard B. Felson, and Jerry M. Suls, Washington, DC: American Psychological Association, 199–232.
- Seale, Darryl A. and Amnon Rapoport (1997), "Sequential Decision Making with Relative Ranks: An Experimental Investigation of the 'Secretary Problem," Organizational Behavior and Human Decision Processes, 69 (March), 221–236.
- Sherif, Muzafer (1936), *The Psychology of Social Norms*, New York: Harper.
- Simonson, Itamar (1990), "The Effect of Purchase Quantity and Timing on Variety-Seeking Behavior," *Journal of Marketing Research*, 27 (May), 150–162.
- Simonson, Itamar and Russell S. Winer (1992), "The Influence of Purchase Quantity and Display Format on Consumer Preference for Variety," *Journal of Consumer Research*, 19 (June), 133–138.
- Singer, Jerome E., Claudia A. Brush, and Shirley C. Lublin (1965), "Some Aspects of Deindividuation, Identification, and Conformity," *Journal of Experimental Social Psychology*, 1 (July), 356–378.
- Snyder, Mark (1987), Public Appearances/Private Realities: The

- Psychology of Self-Monitoring, New York: Freeman.
- Snyder, Mark and Kenneth G. DeBono (1985), "Appeals to Image and Claims about Quality: Understanding the Psychology of Advertising," *Journal of Personality and Social Psychology*, 49 (September), 586–597.
- Snyder, Mark and Steve Gangestad (1982), "Choosing Social Situations: Two Investigations of Self-Monitoring Processes," *Journal of Personality and Social Psychology*, 43 (July), 123–135.
- Tice, Dianne M., Jennifer L. Butler, Mark B. Muraven, and Arlene M. Stillwell (1995), "When Modesty Prevails: Differential Favorability of Self-Presentation to Friends and Strangers,"
- Journal of Personality and Social Psychology, 69 (December), 1120-1138.
- Venkatesan, M. (1966), "Experimental Study of Consumer Behavior: Conformity and Independence," *Journal of Marketing Research*, 3 (November), 384–387.
- Zajonc, Robert B. (1965), "Social Facilitation," *Science*, 149 (3681), 269–274.
- Zimbardo, Phillip G. (1970), "The Human Choice: Individuation, Reason, and Order versus Deindividuation, Impulse, and Chaos," in *Nebraska Symposium on Motivation*, Vol. 18, ed. William J. Arnold and David Levine, Lincoln: University of Nebraska Press, 237–307.