The present research demonstrates that consumers often feel inhibited from engaging in hedonic activities alone, especially when these activities are observable by others. When considering whether to engage in a hedonic and public activity such as going to a movie alone, individuals anticipate negative inferences from others about their social connectedness that reduce their interest in engaging in the activity. Notably, consumers seem to overestimate how much their enjoyment of these activities depends on whether they are accompanied by a companion. Cues that attenuate consumers’ anticipation of negative inferences by making an activity seem more utilitarian or by reducing the anticipated number of observers systematically increases interest in engaging in unaccompanied public activities.

**Keywords:** social norms, inhibition, hedonic consumption, affective forecasting
for experiences such as watching a movie where a consumer’s enjoyment could be impacted by the nonverbal reactions of companions (Ramanathan and McGill 2007).

We propose that another reason solo consumers might avoid certain activities is that they worry about negative evaluations by others (Ajzen 1991; Dahl, Manchanda, and Argo 2001). These concerns would be more relevant for public activities such as watching a movie in a theater than for private activities such as watching a movie at home. They also may be more relevant for hedonic activities such as watching a movie than for more utilitarian activities such as grocery shopping. A consumer might think, “What would others at the theater think if I were to attend this movie alone? Would they infer that if I am alone, I could not find anyone to go with me? What a loner they would think I am!” We propose that this combination of hedonic motivation and public consumption of an activity combine to make consumers particularly likely to anticipate negative inferences from others about their social connectedness if they consume the activity alone. Thus, although enjoyment of watching a movie at home and watching a movie in a theater might be similarly boosted by sharing the experience with a companion, anticipating negative inferences from others would make consumers much less likely to go to a movie at a theater alone (particularly at a time when the movie theater is expected to be full and the solo consumption behavior observed by more people).

Avoiding certain activities when alone would have important implications for consumer well-being as well as for managers. Consumers may refrain from engaging in enjoyable activities that may be enriching even when consumed alone. Moreover, engaging in public solo activities might facilitate social interaction with strangers, which can be enjoyable (Dunn et al. 2007; Epley and Schroeder 2014) and would allow individuals to develop new relationships. Inhibition from engaging in leisure activities alone also would have economic consequences if solo consumers avoid attending movies, concerts, restaurants, museum exhibits, plays, and other activities alone even though they would be prepared to invest both time and money to attend.

The present investigation explores this inhibition against engaging in certain consumption activities alone. First, we discuss related literature and develop our theoretical framework. We then present the results of five studies isolating the characteristics of activities that consumers avoid doing alone, highlighting the inference process that drives this avoidance, examining the cross-cultural generality of this phenomenon, and exploring cues that can attenuate this avoidance. We conclude with a discussion of implications for consumers and managers.

CONCEPTUAL BACKGROUND

Changing demographics suggest the importance of understanding how consumers make decisions about how to spend time alone versus with others. Individuals are getting married later, which has led to the number of single-person households growing to an all-time high (Bolick 2011; Klinenberg 2012). Numbers of close friends also seem to have declined, with Americans reporting fewer close confidants now than they did 25 years ago (McPherson et al. 2006). The number of people with whom consumers participate frequently in leisure activities is even lower than the number of confidants they report (Burt 1997). The number of married consumers juggling dual careers has also increased, resulting in less time for shared leisure activities (Bolick 2011). These trends suggest that consumers will often be confronted with a situation in which they are interested in engaging in a leisure activity but lack an activity partner.

Hedonic versus Utilitarian Activities

Which kinds of activities will be affected most by social context? Research in psychology and consumer behavior suggests that social context may affect willingness to engage in hedonic activities more than utilitarian activities. For hedonic activities (e.g., watching a movie), enjoyment of the consumption experience is the primary motivation for consumption, whereas for utilitarian activities (e.g., going to the grocery store) accomplishing some other goal is the primary motivation (Hirschman and Holbrook 1982). Consumers often enjoy experiences more when they are shared with others, especially when others share their reaction to the experience (Ragunathan and Corfman 1996; Ramanathan and McGill 2007). For example, consumers reported greater enjoyment in the presence of a confederate who shared their reaction to stimuli than in the presence of a confederate who did not share their reaction or exhibited no reaction (Ragunathan and Corfman 1996). Even in the absence of explicit verbal responses, emotional responses conveyed nonverbally can increase enjoyment among consumers as they converge to these others’ responses (Ramanathan and McGill 2007). For utilitarian activities, the presence of others will not typically be needed to accomplish the task (although there are some exceptions, such as when moving belongings into a new home). Thus, in general, consumers feel they need other people less when they are working toward achievement-related goals than when they are focusing on emotional goals like enjoyment (Sellier and Morwitz 2011).

This reasoning suggests that if an individual lacks an activity partner, he or she might be more likely to forgo participating in a hedonic activity than to forgo a utilitarian activity. If consumers anticipate deriving greater enjoyment from hedonic activities when they are with others than when they are alone, this should lead to a main effect of social context on interest in engaging in hedonic activities. Such a main effect of social context on interest in hedonic activities could be explained rationally; systematic
preferences for different activities based on social context may reflect consumers’ desire to maximize their utility. In contrast to this rational process of forgoing hedonic activities while alone, we propose that individuals will be more likely to avoid solo hedonic activities when they expect their behavior to be observed by many others than when they expect their behavior to be observed by few others. This is because they anticipate negative inferences by others if they engage in hedonic activities alone.

Anticipated Inferences from Others

Why might consumers expect negative evaluations from others if they engage in hedonic activities alone? One reason is that if most people anticipate greater enjoyment of a shared versus solo hedonic experience (e.g., someone to talk to while walking through a museum), most people will prefer to share hedonic activities with other people. Thus a plausible inference observers could make is that a consumer is alone because she could not find any companions interested in joining her, perhaps because she has few individuals with whom she is socially connected. Anticipating such inferences about one’s degree of social connection can be a powerful motivator for consumers to change their behavior (McFerran and Argo 2014). Thus if a consumer anticipates that others will make negative inferences about her social connectedness as a result of her solo activity (i.e., “They will think I have no friends”), she may be less likely to engage in the hedonic activity alone.

If consumers anticipate negative inferences from others for engaging in hedonic activities such as going to a movie or out for dinner alone, this is likely to increase their reluctance to engage in these activities alone, especially when their behavior can be observed by others. A large body of research indicates that individuals’ likelihood to engage in a given behavior is impacted by their beliefs about how others will evaluate this behavior (Ajzen 1991). Such effects are stronger when products are consumed publicly rather than privately (Bearden and Etzel 1982). Thus a key test will be whether consumers refrain more from engaging in hedonic activities alone when they think others would observe their behavior. If a consumer’s anticipated enjoyment of the movie is influenced by the anticipated reactions of others, her interest in watching a movie in a public context—the theater—should be affected more than her interest in watching a movie in a private context—at home. She should also feel more reluctant to go to the theater alone when the theater is relatively full and there are more people who can observe her solo consumption. We do not expect consumers to anticipate negative inferences from others for engaging in utilitarian activities alone (indeed, it would be reasonable to anticipate more negative inferences if they refused to go to the dry cleaner alone than if they volunteered to complete such an errand alone).

It is important to consider other reasons why consumers might be reluctant to engage in hedonic-public activities alone. One reason might be the greater status accorded to those who are accompanied by a group of others (Bourdieu 1986; McFerran and Argo 2014; Putnam 2000). Another possible mechanism underlying a reluctance to engage in solitary behavior is the negative inferences one might draw about the self. Although we agree that a self-signaling mechanism might explain reluctance to engage in hedonic activities alone, we expect that social concerns would be more likely than self-signaling concerns to vary across private versus public contexts. Finally, consumers might know from experience that they enjoy hedonic-public activities less when they participate in them alone versus with others. If this is the case, then we should expect their predictions about how much they will enjoy these activities to be accurate. We test all three of these alternative mechanisms in our studies.

Ironically, we predict that the desire to have hedonic consumption experiences accompanied by others might lead solo consumers to shy away from hedonic activities that take place in a social environment. This is unfortunate because the desire to share experiences with others might otherwise lead solo consumers to pursue activities in a public venue where they can interact with others. Consumers who seek to develop social connections or simply be in the company of others might be better off seeking out public-hedonic activities. Yet if solo consumers are concerned about others’ reactions, they may decide not to take part in potentially enjoyable activities that take place in a social environment.

Social Context Guides Activity Preferences

In summary, we predict that reluctance to engage in public-hedonic activities alone will be a key determinant of consumers’ choices among activities. Consumers will be significantly less interested in engaging in public-hedonic activities alone than with others. In contrast, we do not expect consumers to be more reluctant to engage in private hedonic activities or public utilitarian activities alone than with others.

We propose that this effect is driven by consumers’ anticipation that others will infer they have few friends when they engage in hedonic-public activities alone. These anticipated negative inferences by others in the consumption context will reduce both the individual’s predicted enjoyment of the activity and interest in engaging in the activity alone. In this framework, the concern is particularly what others in the consumption environment (e.g., others at the restaurant or movie theater) might think. Consumers might also think about what friends or family members will infer from their behavior, but we expect consumers to appreciate that people close to them already have well-formed beliefs about their social connections.
We further predict that cues that reduce the likelihood of others’ negative inferences will moderate these effects. For example, if consumers anticipate that others will draw negative inferences more from solitary hedonic activities that are public (and hence more observable) than those that are private, activities that are private should disinhibit solo consumption. Likewise, if consumers anticipate that others will draw negative inferences if they engage in hedonic but not utilitarian activities alone, cues that make activities seem more utilitarian should attenuate the effect. Finally, if consumers are concerned about others’ negative inferences, these inferences should be more of a deterrent when there are many than when there are few observers in the consumption context (e.g., when a movie theater is relatively full vs. relatively empty).

We present the results of five studies that test our key predictions. Study 1 compares consumers’ interest in engaging in hedonic/public activities versus utilitarian/private and hedonic/private activities alone or with others and examines the inferences they believe others will draw if they engage in these activities. In study 2, we examine consumers’ interest in consuming a public-hedonic experience (seeing a movie in a theater) alone versus with friends across three different cultures (United States, India, and China) to test the generalizability of the effect. In study 3, we follow consumers through a real consumption experience to test whether their forecasts about how much they will enjoy an experience alone (vs. with a companion) are accurate. Our final two studies examine disinhibition of consuming hedonic experiences alone. Study 4 tests whether a cue that an activity serves a utilitarian purpose reduces anticipated negative inferences and therefore increases interest in the activity. Study 5 further tests the role of others’ inferences by holding constant the activity (seeing a movie in a theater) and asking participants to choose whether they would prefer to have the experience when they think there will be more versus fewer observers.

**STUDY 1: EFFECTS OF OBSERVABILITY, NATURE OF ACTIVITY, AND SOCIAL CONTEXT ON INTEREST IN ACTIVITIES**

In study 1, we manipulate whether participants consider engaging in an activity alone or with two or more companions. We test several activities selected to be perceived as private or public and hedonic or utilitarian. This allows us to test whether consumers are more reluctant to engage in hedonic-public activities when they are alone compared to when they are with others. The study also examines the inferences that participants expect others to make when they engage in various activities either alone or with others, providing insight into the process mechanism. To assess the generality of our effects, we measured several individual difference variables.

**Design, Stimuli, and Procedures**

This study used a 2 (social context: alone vs. together) × 3 (activity type: hedonic-private vs. hedonic-public vs. utilitarian-public) × 2 (replication of activity type) mixed design in which social context was manipulated between subjects and the other factors were manipulated within subjects. Ninety-six US participants (53% male) ranging in age from 18 to 67 years (average age 37) completed the study on Mechanical Turk (mTurk) in exchange for a small monetary payment.

Participants were randomly assigned to imagine doing each of six activities alone or to imagine doing the activities with two or more friends. Each participant considered six different activities: two *hedonic-private* activities (“Watch a movie at home,” “Play a video game on your computer”), two *hedonic-public* activities (“Go to a restaurant for dinner,” “Go to see a movie in a theater”), and two *utilitarian-public* activities (“Go to the grocery store,” “Go for a walk for exercise”).

**Manipulation checks.** For each activity, participants rated the extent to which the activity is engaged in to accomplish something or to experience pleasure or other emotions (1 = Completely utilitarian, 6 = Completely hedonic) and the extent to which engaging in the activity would be private or public (1 = Completely private, 6 = Completely public).

**Dependent measures.** For each activity, participants reported how likely they would be to engage in the activity (1 = Not at all likely, 6 = Very likely) and how much they thought they would enjoy the activity (1 = Not at all, 6 = Very much) either alone or with two or more friends, depending on the experimental condition to which they had been assigned. Next, to measure participants’ beliefs about others’ (negative) inferences, participants were asked what other people would say if they observed them engaging in the activity and were asked to guess how many friends they have (1 = That I have few friends, 6 = That I have many friends). For example, participants in the alone condition were asked how many friends others would guess they have if they went to a movie in a theater alone, whereas participants in the together condition were asked how many friends others would guess they have if they went to a movie in a theater with two or more friends.

**Demographics and individual difference measures.** After completing the dependent measures, all respondents completed several scales to test for relevant individual differences: the 18-item self-monitoring scale (Snyder and Gangestad 1986; e.g., “I guess I put on a show to impress or entertain others,” “I have trouble changing my behavior to suit different people and different situations”), Rosenberg (1965) self-esteem scale (e.g., “On the whole, I am satisfied with myself,” “I feel that I have a number of good qualities”), extroversion scale (Eysenck, and
Barrett 1985: e.g., “Are you a talkative person?,” “Do you like mixing with people?”), and reported their gender, age, and whether they have siblings.

**Results**

**Manipulation checks.** A repeated-measures analysis of variance (ANOVA) with social context (alone vs. together) as a between-subjects factor and activity type (hedonic-private, hedonic-public, and utilitarian-public) and replicate as within-subjects factors indicated that the activities selected to be hedonic were rated by participants as more hedonic than those selected to be utilitarian ($M_{\text{hedonic public}} = 4.82$ vs $M_{\text{hedonic private}} = 5.12$ vs $M_{\text{utilitarian public}} = 2.30$, $F(2, 188) = 291.10$, $p < .001$). The main effect of replicate and the activity type $\times$ replicate interaction were significant, indicating differences in perceptions of specific activities, but no other effects were significant ($p$ values > .25). A similar ANOVA indicated that the activities selected to be public were rated by participants as more public than those selected to be private ($M_{\text{hedonic public}} = 4.93$ and $M_{\text{utilitarian public}} = 4.69$ vs. $M_{\text{hedonic private}} = 1.73$, $F(2, 186) = 291.10$, $p < .001$). Again, the main effect of replicate and the activity type $\times$ replicate interaction were significant, indicating differences in perceptions of specific activities, but no other effects were significant ($p$ values > .18).

**Interest in activity.** A repeated-measures ANOVA with social context as a between-subjects factor and activity type and replicate as within-subjects factors was conducted on participants’ reported likelihood of participating in the activity. A significant effect of activity type emerged ($F(2, 186) = 7.78$, $p = .001$), qualified by the predicted activity type $\times$ social context interaction ($F(2, 186) = 66.19$, $p < .001$). Simple effects analyses revealed that participants in the hedonic-private condition thought they would enjoy the activity more alone ($M = 4.96$) than together ($M = 4.32$), $F(1, 186) = 12.36$, $p < .001$. Those in the utilitarian-public condition thought they would be as likely to enjoy the activity alone ($M = 4.37$) as together ($M = 4.17$), $F(1, 186) = 1.14$, not significant (NS). However, as predicted, participants in the hedonic-public condition thought they would enjoy the activity less alone ($M = 3.09$) than together ($M = 5.21$), $F(1, 186) = 135.83$, $p < .001$. No significant activity type $\times$ social context $\times$ replicate interaction emerged ($F(2, 186) = 1.49$, NS), indicating that the interaction effect was robust across replicates. No three-way interaction effects emerged between condition, demographic variables, and individual difference measures (self-monitoring, self-esteem, extroversion, gender, age, whether has siblings). We also entered these variables as covariates in our analyses, and the main effect of activity type and the activity type $\times$ social context interaction remained significant.

**Anticipated enjoyment.** A repeated-measures ANOVA was conducted on predicted enjoyment of the six activities to see whether this revealed a similar pattern of effects to that obtained for likelihood of engaging in the activities. A significant effect of activity type emerged ($F(2, 186) = 7.78$, $p = .001$), qualified by the predicted activity type $\times$ social context interaction ($F(2, 186) = 66.19$, $p < .001$). Simple effects analyses revealed that participants in the hedonic-private condition thought they would enjoy the activity more alone ($M = 4.96$) than together ($M = 4.32$), $F(1, 186) = 12.36$, $p < .001$. Those in the utilitarian-public condition thought they would be as likely to enjoy the activity alone ($M = 4.37$) as together ($M = 4.17$), $F(1, 186) = 1.14$, not significant (NS). However, as predicted, participants in the hedonic-public condition thought they would enjoy the activity less alone ($M = 3.09$) than together ($M = 5.21$), $F(1, 186) = 135.83$, $p < .001$. No significant activity type $\times$ social context $\times$ replicate interaction emerged ($F(2, 186) = 1.49$, NS), indicating that the interaction effect was robust across replicates. No three-way interaction effects emerged between condition, demographic variables, and individual difference measures (self-monitoring, self-esteem, extroversion, gender, age, whether has siblings). We also entered these variables as covariates in our analyses, and the main effect of activity type and the activity type $\times$ social context interaction remained significant.

An analysis in which we averaged ratings of likelihood and anticipated enjoyment ($r = .723$) to create a composite score revealed the same pattern of simple effects of social context for each activity type as emerged for the ratings of likelihood of engaging in the behaviors.

**Anticipated inferences about number of friends.** As expected, a repeated-measures ANOVA on anticipated observers’ inferences about the respondent’s number of friends showed a similar pattern of effects. A significant effect of condition emerged ($F(2, 188) = 17.89$, $p < .001$), qualified by the predicted condition $\times$ social context interaction ($F(2, 188) = 46.47$, $p < .001$; see figure 2). Simple effects analyses indicated that for hedonic-public activities, participants in the alone condition expected observers to infer they had fewer friends if they engaged in the activity than participants in the together condition ($M_{\text{alone}} = 2.46$ vs. $M_{\text{together}} = 4.96$; $F(1, 188) = 184.84$, $p < .001$). No effect of social context emerged in the hedonic-private condition ($M_{\text{alone}} = 4.09$ vs. $M_{\text{together}} = 4.10$, $F < 1$), and the effect of social context in the utilitarian-public condition ($M_{\text{alone}} = 4.33$ vs. $M_{\text{together}} = 4.67$) was only marginal, $F(1, 188) = 3.08$, $p = .08$. A significant effect of replicate also emerged, $F(2, 188) = 5.56$, $p = .02$, although replicate did not interact with the treatment manipulations.
Mediation. Because the preceding analyses show the same directional pattern across replicates, we computed the average score across the two replicates for each activity type to test for mediation using the Hayes PROCESS macro (model 4). For hedonic-public activities, the bias-corrected indirect effect of social context (alone vs. together) on likelihood of engaging in the activities through the proposed mediator (inferences about number of friends) was significant (95% confidence interval [CI], 0.71–1.83), indicating successful mediation through this path. The indirect effect of social context on anticipated enjoyment was nonsignificant for both hedonic-private (95% CI, −0.07 to .12) and utilitarian-public activities (95% CI, −0.01 to .23), indicating moderated mediation. We used the same approach to test mediation of the effect on anticipated enjoyment. For hedonic-public activities, the bias-corrected indirect effect of social context on anticipated enjoyment through inferences about number of friends was significant (95% CI, 0.46–1.54), indicating successful mediation through this path. The indirect effect of social context on anticipated enjoyment was nonsignificant for both hedonic-private (95% CI, −0.04 to .13) and utilitarian-public activities (95% CI, −.01 to .23), indicating moderated mediation.

Discussion

These results suggest that consumers are less likely to engage in hedonic-public activities alone and think they will enjoy these activities less than activities that are either public and utilitarian or private and hedonic. Notably, we do not observe a general reluctance to engage in public behaviors when alone: consumers imagining they were alone expressed more interest in public utilitarian activities than consumers imagining they were with two or more friends. Anticipated enjoyment is a less important motivator for
utilitarian than for hedonic activities, and consumers may reason that if they are alone, they may as well get the grocery shopping done or get some exercise. Nor do we observe a general reluctance to engage in hedonic activities when alone: consumers imagining they were alone expressed more interest in private hedonic activities than consumers imagining they were with two or more friends. As predicted, in the public-hedonic condition, the effects are mediated by consumers’ predictions that others will infer they have fewer friends if they engage in the behaviors alone.

STUDY 2: GENERALIZATION ACROSS CULTURES

In study 2, we examine the cross-cultural generalizability of consumers’ reluctance to engage in hedonic-public activities alone due to the negative inferences they anticipate from others. In study 1, our participants were based in the United States, an individualistic culture (Hofstede 2001). Will we observe the same activity preferences among those from collectivistic cultures? While collectivistic cultures place greater value on social cohesion, which may strengthen the results, more interdependent individuals also might feel more connected with close others even when they are alone (Hofstede 2001), reducing anticipation of negative inferences and weakening the effects. To test these competing predictions empirically, we compared activity preferences among consumers from the United States, India, and China. These countries differ on several dimensions that could be relevant to our phenomenon including individualism versus collectivism and power distance.

Participants, Design, and Procedures

We collected data using two online panels. A total of 271 participants (54% male) ranging in age from 18 to 74 years completed this study: 100 US participants (47% male, average age 35) and 101 Indian participants (69% male, average age 31) completed the study on Amazon’s mTurk, and 70 Chinese participants (39% male, average age 26) completed the study on a Chinese site similar to mTurk (en.Zhubajie.com) in exchange for a small payment. All participants completed the study in English and responded to the same dependent measures. Participants were asked to “Imagine there is a movie you would really like to see that is currently playing at a theater near you. You know that it will only be playing for another week before it moves out of the theaters.” Those in the alone conditions were asked to “Suppose that no one is available to go with you to see this movie” while those in the together condition were asked to “Suppose that two or more friends are available to go with you to see this movie.”

After reading this text, participants responded to a series of dependent measures tapping their interest in going to see the movie (“How interested would you be in going to see this movie alone [with two or more friends] at a theater?” and “How much would you enjoy the experience of going to see this movie alone [with two or more friends] at a theater?” 1 = Not at all, 7 = Very much), and their predictions about how others would react to their seeing the movie (“If others at the theater saw you there alone [with two or more friends] and were asked to guess how many friends you have, what do you think they would guess?” and “If others at the theater saw you there alone [with two or more friends] and were asked to guess how many members of your family you are close to, what do you think they would guess?” 1 = That I have few friends/close family members, 7 = That I have very many friends/close family members).

Next, we measured participants’ demographic characteristics (age, gender, marital status, nationality) and several individual differences. To test for effects of cultural and individual differences, we included 31 items measuring independence and interdependence (α = .83 and .85; Singelis 1994), 10 items measuring power distance (α = .46; Hofstede 2001; Zhang, Winterich, and Mittal 2010), 6 items measuring social anxiety (α = .85; Fenigstein, Scheier, and Buss 1975), 3 items measuring desire for status (α = .88; Dahling, Whitaker, and Levy 2009), and 10 items measuring need to belong (α = .77; Leary et al. 2013). Social anxiety, desire for status, and need to belong did not reliably explain differences across conditions and is not discussed further.

Results

Cultural differences. First, we examined whether responses to the individual differences scales varied based on the nationality of respondents. A 3 (Nationality: China, India, US) × 2 (Social context: Alone, Together) × 2 (Self-Construal: Independent, Interdependent) repeated-measures ANOVA in which self-construal was the repeated factor showed only a main effect of nationality, F(2, 241) = 25.24, p < .001, and an interaction between nationality and self-construal, F(2, 241) = 7.68, p < .001. As shown in table 2, Indian participants had higher scores on the two measures combined (M = 6.71) than did Chinese (M = 5.86) or US participants (M = 5.96). While US participants scored higher on the independence (M = 6.22) than on the interdependence items (M = 5.71; F(1, 91) = 11.58, p < .001), Chinese participants scored marginally lower on the independence (M = 5.76) than on the interdependence items (M = 5.96; F(1, 66) = 2.79, p = .10). Indian participants scored equally high on both independence (M = 6.72) and interdependence items (M = 6.70; p > .90).
TABLE 2
MEANS ACROSS COUNTRIES AND SOCIAL CONTEXTS IN STUDY 2

<table>
<thead>
<tr>
<th>Social context</th>
<th>Interest in activity</th>
<th>Predicted enjoyment</th>
<th>Others’, need to belong</th>
<th>Others’, desire for status</th>
<th>Social anxiety</th>
<th>Power distance</th>
<th>Number of friends</th>
<th>Number of family members</th>
</tr>
</thead>
<tbody>
<tr>
<td>China Alone (n = 34)</td>
<td>3.71 (2.58)</td>
<td>4.76 (1.48)</td>
<td>3.17 (0.50)</td>
<td>6.31 (1.74)</td>
<td>4.79 (1.47)</td>
<td>3.83 (1.56)</td>
<td>3.34 (40)</td>
<td>3.32 (1.84)</td>
</tr>
<tr>
<td>China Together (n = 36)</td>
<td>4.81 (1.94)</td>
<td>5.03 (1.73)</td>
<td>3.34 (63)</td>
<td>6.41 (1.27)</td>
<td>4.71 (1.93)</td>
<td>3.92 (45)</td>
<td>4.14 (45)</td>
<td>3.78 (1.56)</td>
</tr>
<tr>
<td>India Alone (n = 51)</td>
<td>4.41 (2.01)</td>
<td>5.03 (1.73)</td>
<td>3.34 (63)</td>
<td>6.41 (1.27)</td>
<td>4.71 (1.93)</td>
<td>3.92 (45)</td>
<td>4.14 (45)</td>
<td>3.78 (1.56)</td>
</tr>
<tr>
<td>India Together (n = 50)</td>
<td>6.14 (1.04)</td>
<td>6.12 (1.14)</td>
<td>5.97 (1.04)</td>
<td>6.77 (1.03)</td>
<td>5.97 (1.04)</td>
<td>6.77 (1.03)</td>
<td>5.97 (1.04)</td>
<td>6.77 (1.03)</td>
</tr>
<tr>
<td>US Alone (n = 50)</td>
<td>4.75 (2.17)</td>
<td>5.30 (1.73)</td>
<td>5.97 (1.04)</td>
<td>6.77 (1.03)</td>
<td>5.97 (1.04)</td>
<td>6.77 (1.03)</td>
<td>5.97 (1.04)</td>
<td>6.77 (1.03)</td>
</tr>
<tr>
<td>US Together (n = 50)</td>
<td>5.39 (1.58)</td>
<td>5.78 (1.20)</td>
<td>6.77 (1.03)</td>
<td>6.77 (1.03)</td>
<td>5.97 (1.04)</td>
<td>6.77 (1.03)</td>
<td>5.97 (1.04)</td>
<td>6.77 (1.03)</td>
</tr>
</tbody>
</table>

NOTE.—N = 27. Standard deviations are in parentheses.

These results are consistent with country-level measures that suggest China’s score on individualism is low (20), India’s score is moderate (48), and the US score is high (91; www.geert-hofstede.com).

A 3 nationality × 2 social context ANOVA showed that Indian (M = 4.02) and Chinese participants (M = 3.92) scored higher on power distance than US participants (M = 3.43; F(2, 256) = 24.23, p < .001). These results are also consistent with country-level measures that suggest that both China (80) and India (77) are high on power distance, whereas the United States is lower (40; www.geert-hofstede.com). Thus we observe the predicted differences in self-construal and power distance across the US, Indian, and Chinese participants.

Interest in activity. A 3 nationality × 2 social context ANOVA on interest in the activity showed a main effect of nationality, F(2, 267) = 6.00, p < .01, a main effect of social context, F(1, 267) = 28.31, p < .001, and no interaction between social context and nationality, p > .15. Interest in going to a movie in a theater was higher for US (M = 5.10) and Indian (M = 5.28) participants than for Chinese participants (M = 4.31). However, as predicted, participants of all three nationalities expressed less interest in going to see the movie alone (M = 4.29) than in going with two or more friends (M = 5.51). The same analysis using age and gender of participants as covariates showed the same results, and neither covariate was significant.

Anticipated enjoyment. A 3 × 2 ANOVA on anticipated enjoyment showed consistent results, with a main effect of nationality, F(2, 267) = 10.27, p < .001, a main effect of social context, F(1, 267) = 45.09, p < .001, and no interaction, p > .24. Anticipated enjoyment was higher for US (M = 5.30) and Indian (M = 5.27) participants than for Chinese participants (M = 4.18). However, as predicted, participants of all three nationalities anticipated less enjoyment in going to see the movie alone (M = 4.19) than in going with two or more friends (M = 5.64). The same analysis using age and gender as covariates showed the same results, and neither covariate was significant.

Anticipated inferences about number of friends. We asked participants to predict others’ inferences about the number of friends they had and the number of family members to whom they were close. A confirmatory factor analysis shows that these measures are distinct from participants’ interest in the activity: interest and enjoyment load on one factor and the two inference measures load on a separate factor (all loadings > .85).

A 3 (Nationality: China, India, US) × 2 (Social context: Alone, Together) v 2 (Inferences: Number of friends, Number of family members) repeated-measures ANOVA in which inferences was the repeated factor showed a main effect of social context, F(1, 270) = 57.21, p < .001, a main effect of nationality, F(2, 270) = 40.08, p < .001, an
interaction between social context and inferences, $F(2, 270) = 22.00$, $p < .001$, and an interaction between social context and nationality, $F(2, 270) = 11.40$, $p < .001$. Participants thought that others observing their behavior would infer they had both more friends and more close family members when they imagined going to a movie with friends ($M = 4.60$) than when they imagined going alone ($M = 3.42$). Indian participants reported higher numbers for the two measures combined ($M = 4.96$) than did Chinese ($M = 3.52$) or US participants ($M = 3.55$). The interaction between social context and inferences shows that the effect of social context was stronger for US participants ($M_{alone} = 2.61$ vs. $M_{together} = 4.49$; $F(1, 100) = 65.05$, $p < .001$) and Chinese participants ($M_{alone} = 2.81$ vs. $M_{together} = 4.23$; $F(1, 71) = 20.22$, $p < .001$) than for Indian participants ($M_{alone} = 4.85$ vs. $M_{together} = 5.07$; $p > .40$). Finally, the interaction between social context and inferences shows that the effect of social context on inferences about friends ($M_{alone} = 3.12$ vs. $M_{together} = 4.76$; $F(1, 270) = 74.23$, $p < .001$) was stronger than the effect of social context on inferences about close family members ($M_{alone} = 3.73$ vs. $M_{together} = 4.43$; $F(1, 270) = 15.50$, $p < .001$).

Mediation. Bootstrapping analyses using the Hayes PROCESS macro (model 5) show that controlling for nationality, inferences about number of friends partially mediate the effects of social context on both interest and anticipated enjoyment. Although the direct effect of social context on interest remained significant, the indirect effect of inferences about number of friends was significant (95% CI, .01–.27). In contrast, the indirect effect of inferences about number of close family members on interest was NS (95% CI, −.02 to .09).

Results for mediation of the effect of social context on anticipated enjoyment were consistent. Again, although the direct effect of social context on anticipated enjoyment remained significant, the indirect effect of inferences about number of friends was significant (95% CI, .02–.23). In contrast, the indirect effect of inferences about number of close family members on enjoyment was NS (95% CI, −.01 to .08). Thus inferences about number of friends contribute to the effect of social context on anticipated enjoyment and interest in going to a movie.

Discussion

The results of study 2 suggest that in both individualistic and collectivistic cultures, consumers are less interested in engaging in a hedonic-public activity by themselves than in the company of others. Is this a rational response, driven by their anticipation that they will enjoy the activity less when alone than with others? While this explanation is supported by the significant effect of social context on anticipated enjoyment, partial mediation of the effect by participants’ inferences about the number of friends they have suggests that the effect is at least partially driven by concerns about others’ inferences. Is the effect driven by the belief that engaging in an activity with others will generate more status than engaging in the activity alone (McFerran and Argo 2014)? Although need for status was significantly higher for Indian and Chinese participants than for US participants ($F(2, 267) = 20.18$, $p < .001$), we did not observe a stronger effect of social context for Indian and Chinese participants, suggesting that desire for status does not drive the effect.

One limitation of the first two studies is that we rely on scenarios to test our predictions. In our next study, we measure people’s interest in engaging in an activity either alone or with others and then compare their anticipated enjoyment with their actual enjoyment of the activity.

STUDY 3: ARE CONSUMERS’ PREDICTIONS ABOUT ENJOYMENT ACCURATE?

We have suggested that reluctance to engage in certain activities alone may lead consumers to miss out on opportunities to derive enjoyment from solitary consumption. To test this empirically, in this study we compare the actual enjoyment experienced by individuals who had a public-hedonic experience—exploring an art gallery on campus—either with or without a companion. In addition, we compared participants’ actual enjoyment to the forecasts they provided about how much they would enjoy the experience. Recent research shows that the context in which people consume an experience can have less of an impact on their actual experience than they expected because their attentional resources are consumed by the focal stimulus and not the context (Morewedge et al. 2010). Likewise, we do not expect participants to make accurate predictions about the effect of social context on their enjoyment of an experience. Specifically, we expect them to overestimate the degree to which being accompanied by a companion will affect their enjoyment of an experience.

We chose a student union art gallery as the venue for the study because it was accessible to us, relatively small (meaning that a visit could be completed within 5 to 10 minutes), and quite public (the gallery has glass walls, allowing passersby to observe those in the gallery). Although we expected participants to view a visit to the gallery as a relatively hedonic experience, we also predicted that variations in their perceptions about whether it was a hedonic or utilitarian experience would moderate the effect of social context as in study 1.

Design, Stimuli, and Procedures

Eighty-six participants (54% male, average age 22) walking through a campus student union were recruited to
participate in the study. Interns were instructed to recruit participants walking alone for the alone condition and pairs of participants walking together for the together condition. All participants were offered entry in a lottery to win $250 in exchange for their time.

After participants had agreed to take part in the study, they were escorted to a set of tables where they were greeted by the experimenters and filled out an informed consent form. All participants were told that as part of the study, they would be visiting an art gallery hosting a special exhibit nearby in the student union, approximately 50 yards away from the experimenter tables. Participants assigned to the forecasting conditions (n = 29 in the alone condition and n = 30 in the together condition) filled out a series of dependent measures consistent with the measures used in our earlier studies. In addition, we had a no-forecast control condition in which participants were alone and did not make forecasts (n = 27). We included this condition to test whether those who did and did not make forecasts would rate their experiences differently. Those in the no-forecast condition read the same description of the special exhibit prior to their visit to the gallery but did not respond to any dependent measures prior to entering the gallery.

Next, all participants were asked to spend at least five minutes exploring the art gallery at their own pace, either alone or with their partner, depending on their experimental condition. After they visited the gallery, all participants returned to the experimenter tables to answer a series of dependent measures.

Dependent measures. Those in the forecasting conditions were asked how interested they were in visiting the gallery, how much they thought they would enjoy the gallery (1 = Not at all, 7 = Very much), and what others would infer about their number of friends if they saw them visiting the gallery (1 = That I have few friends, 7 = That I have many friends). To disentangle participants’ predictions about others’ inferences from their own beliefs about the number of friends they have, we also asked participants to indicate how many friends they had (1 = I have few friends, 7 = I have many friends).

After their visit to the gallery, all participants were asked to indicate how much they had enjoyed their visit to the art gallery (1 = Not at all, 7 = Very much), how interested they would be in attending similar exhibits in the future (1 = Not at all, 7 = Very much), and how many friends they thought others who saw them had inferred they had (1 = That I have few friends, 7 = That I have many friends). Again, we asked participants to report how many friends they had (1 = I have few friends, 7 = I have many friends). We also asked them how much they liked art (1 = Not at all, 7 = Very much), whether they were motivated to visit the gallery by enjoyment (hedonic) or to learn something (utilitarian; 1 = Enjoyment, 7 = Learning), how knowledgeable they were about art (1 = Not at all, 7 = Very knowledgeable), how familiar they were with art (1 = Not at all, 7 = Very familiar), whether they had visited this art gallery in the past (yes or no), and how long it had been since they visited an art gallery (1 = Less than six months ago, 4 = More than one year ago). Finally, participants provided their gender and age.

Results
Anticipated enjoyment and interest in activity. Replicating the results of our earlier studies, participants in the forecasting conditions predicted that they would enjoy the art gallery experience more if they were accompanied by a companion (M = 5.70) than if they were alone (M = 4.76; F(1, 57) = 11.71, p < .001; see table 3). They also indicated less interest in visiting the art gallery alone (M = 4.07) than when accompanied by a companion (M = 6.00; F(1, 57) = 28.02, p < .001).

Anticipated enjoyment versus actual enjoyment. First, we compared the actual enjoyment of participants in the alone conditions who had made or had not made forecasts prior to visiting the art gallery. Neither actual enjoyment (Mforecast = 5.25 vs. Mno forecast = 4.89; F(1, 54) = .80, p > .34) nor interest in seeing similar exhibits in the future (Mforecast = 5.25 vs. Mno forecast = 4.86; F(1, 54) = 1.00, p > .32) differed between conditions. Thus forecasting does not seem to affect actual enjoyment of the experience or interest in having the experience again. More central to our predictions, the design of our study allows us to compare anticipated enjoyment with actual enjoyment of the art gallery across the alone and together forecasting conditions. A 2 (Social context: alone, together) × 2 (Timing: before, after) repeated-measures ANOVA on enjoyment in which timing was the within-subjects factor showed a significant main effect of social context, F(1, 56) = 4.90, p < .05, as well as a marginal interaction between social context and timing, F(1, 56) = 3.84, p < .06 (see figure 3). Notably, although predicted enjoyment was significantly lower in the alone condition than in the together condition, as in our earlier studies, actual enjoyment did not significantly differ across the alone (M = 5.25) and together conditions (M = 5.40; F(1, 56) = .20, p > .65). The within-subjects contrasts were NS (in the alone condition, p = .14 and in the together condition, p = .22).

Similarly, a 2 (Social context: alone, together) × 2 (Timing: before, after) repeated-measures ANOVA on interest showed a significant main effect of social context, F(1, 56) = 12.01, p < .001, as well as a significant interaction between social context and timing, F(1, 56) = 16.73, p < .001. Although interest prior to visiting the gallery was significantly lower in the alone condition than in the together condition, as shown earlier, interest in seeing similar exhibits in the future after visiting the gallery did not differ
across the alone ($M = 5.25$) and together conditions ($M = 5.23$; $F(1, 56) = .00, p > .96$).

*Anticipated inferences about number of friends.* Also replicating our earlier studies, participants in the forecasting conditions thought others would infer that they had fewer friends if they visited the gallery alone ($M = 3.59$) than if they visited with a companion ($M = 5.93$; $F(1, 57) = 52.08, p < .001$). This difference was significant even when we used participants’ reported actual number of friends as a covariate, $F(1, 56) = 43.41, p = .01$.

Consistent with the other dependent measures, differences in others’ anticipated inferences about one’s number of friends were also attenuated after visiting the gallery. A $2$ (Social context: alone, together) $\times 2$ (Timing: before, after) repeated-measures ANOVA on inferences showed a significant main effect of social context, $F(1, 56) = 28.84, p < .001$, as well as a significant interaction between social context and timing, $F(1, 56) = 19.73, p < .001$. Anticipated inferences about number of friends differed more across conditions prior to visiting the gallery, as shown earlier, than after visiting the gallery, when inferences in the alone ($M = 4.29$) and together conditions were more similar ($M = 5.27$; $F(1, 56) = 7.25, p < .01$).

### Mediation

As in our earlier studies, a bootstrapping analysis using the Hayes PROCESS macro (model 4) showed that anticipated inferences about number of friends mediated the effect of social context on interest in visiting the gallery (indirect effect $95\%$ CI, $0.92–0.95$ and predicted enjoyment (indirect effect $95\%$ CI, $0.13–0.62$). In contrast, participants’ own perceptions of the number of friends they had did not mediate the effect of social context on interest (indirect effect $95\%$ CI, $–0.22$ to $0.06$) or anticipated enjoyment (indirect effect $95\%$ CI, $–0.14$ to $0.03$). This difference suggests that anticipated inferences by observers, rather than beliefs about their own social connectedness (i.e., a self-signaling mechanism), drive the effect.

### Moderation by hedonic/utilitarian perceptions

Consistent with study 1, whether the consumption experience was perceived to be hedonic or utilitarian moderated the effect of social context on interest and anticipated enjoyment. The degree to which participants reported that they were motivated to visit the gallery to enjoy it (1 = Hedonic) rather than to learn something (7 = Utilitarian) moderated the effect (values ranged from 1 to 7; $M = 3.82, SD = 1.85$). Beliefs about the hedonic/utilitarian nature of the activity had a marginal main effect ($b = .16, p = .09; 95\%$ CI, $–0.03$ to $.35$) and interacted with the effect of social context ($b = –.23, 95\%$ CI, $–.42$ to $–.04$) on interest. Specifically, the effect of social context was significantly stronger ($R^2$ change $0.17, F(1, 49) = 6.12, p < .05$) one SD below the mean (when the activity was perceived to be more hedonic; $b = 1.48, p < .001; 95\%$ CI, $0.98–1.98$) than it was one SD above the mean (when the activity was perceived to be more utilitarian; $b = .61, p < .05; 95\%$ CI, $1.11–1.11$).

We observe a very similar pattern of results when anticipated enjoyment is the dependent variable. Beliefs about the hedonic/utilitarian nature of the activity marginally interacted with the effect of social context ($b = –.13, 95\%$ CI, $–.28$ to $0.02$) on anticipated enjoyment. Specifically, the effect of social context was marginally stronger ($R^2$ change $0.04, F(1, 49) = 2.91, p < .10$) 1 SD below the mean (when the activity was perceived to be more hedonic; $b = .76,$
Discussion

This study provides empirical support for a key premise of our investigation: consumers who forgo hedonic activities alone are missing out on opportunities for rewarding experiences. Consumers in this study overestimated how much being alone versus with a companion would impact their enjoyment of the art gallery: they expected to enjoy it more with others than alone when in fact their enjoyment did not depend on whether or not they were with a companion.

In addition, this study replicates the effect of social context on interest and anticipated enjoyment from our earlier studies using a real consumption setting (i.e., consumers visited a real art gallery). Further, consistent with study 1, the results demonstrate moderation by the extent to which the consumers perceived the experience as hedonic versus utilitarian. These results extend study 1’s comparisons across activities because the experience in this study is held constant across participants, and it is consumers’ perceptions of the nature of the experience (hedonic vs. utilitarian) that moderate the effect of social context.

The next two studies examine whether we can disinhibit solo consumption of activities. If inhibition is due to others’ anticipated negative inferences about engaging in hedonic (vs. utilitarian) activities alone, then making a public activity seem more utilitarian should attenuate participants’ reluctance to engage in the activity. In study 4, we show that providing a cue that the activity is at least partly utilitarian attenuates the effects of social context on anticipated inferences and increases willingness to engage in the behavior alone.

**STUDY 4: DISINHIBITING SOLITARY PUBLIC CONSUMPTION**

Many coffee shops provide newspapers for their customers to read while enjoying a beverage. In addition to providing information, might newspapers or other reading material disinhibit solitary public consumption, allowing customers to enjoy spending time alone in a public place? In this study, we hold constant the activity (a trip to a coffee shop) and vary whether the activity is engaged in alone or with others and whether or not there is a cue suggesting that the activity was engaged in at least in part for utilitarian reasons. We predicted that cuing a utilitarian component of the activity would reduce the likelihood that consumers would anticipate negative evaluations from others if they were to engage in the activity alone.

**Design, Stimuli, and Procedures**

This study used a 2 (activity type: hedonic vs. utilitarian) × 2 (social context: alone vs. together) between-subjects design. A total of 242 participants completed the study as part of an introductory marketing course for credit or on mTurk in exchange for a small monetary payment. All participants were asked to imagine being at a coffee shop. Participants in the alone conditions were told to imagine they are at a coffee shop “by yourself,” whereas those in the together conditions were told to imagine they are at a coffee shop with two or more friends. Participants in the hedonic conditions were told, “You don’t have any reading material (or your phone) with you. You are sitting. . . and having a drink.” Participants in the utilitarian conditions were told, “You have reading material (but not your phone) with you. You are sitting. . . and doing some work while having a drink.”

**Dependent measures.** All participants indicated how interested they would be in having this experience at the coffee shop (1 = Not at all, 7 = Very much) and how much they would enjoy having this experience at the coffee shop (1 = Not at all, 7 = Very much). Next, participants were asked to predict how many friends others would guess they have if they saw them at the coffee shop (1 = That I have few friends, 7 = That I have many friends). Finally, an item intended to serve as a manipulation check asked whether others would infer that their reason for being at the coffee shop was “to enjoy yourself (hedonic) versus to accomplish something (utilitarian)” (1 = To enjoy myself, 7 = To accomplish something).

**Results**

**Manipulation check.** Participants expected others to infer that their reason for being at the coffee shop was to enjoy themselves more in the hedonic activity condition ($M_{hedonic} = 3.59$ vs. $M_{utilitarian} = 3.95$), $F(1, 239) = 3.72$, $p = .055$. Respondents also anticipated that others would infer their reason for being at the coffee shop was to enjoy themselves more if they were with others than alone ($M_{together} = 3.54$ vs. $M_{alone} = 3.97$), $F(1, 239) = 5.05$, $p = .03$, but no social context × activity type interaction emerged ($F < 1$), indicating that in both the alone and with others conditions, respondents perceived the activity as more hedonic in the hedonic condition.

**Interest in activity.** An ANOVA revealed a main effect of social context on participants’ interest in having the experience at the coffee shop. As shown in table 4, participants who imagined sitting at the coffee shop with two friends were more interested in having this experience ($M = 4.84$) than those who imagined being there alone.
In how interested they were in having the coffee shop experience with friends than alone (Mtogether = 5.39 vs. Malone = 3.72), F(1, 238) = 32.98, p < .001. In the utilitarian condition, respondents did not differ in how interested they were in having the coffee shop experience alone versus with friends (Malone = 4.71 vs. Mtogether = 4.26), F(1, 238) = 1.82, p = .18. Looking at the simple effects within social context condition reveals that respondents thinking about attending the coffee shop with two friends were more interested in the experience in the hedonic than in the utilitarian condition (Mhedonic = 5.39 vs. Mutilitarian = 4.26), F(1, 238) = 13.90, p < .0001. However, as predicted, respondents anticipated that if they were alone, they would be more interested in the experience in the utilitarian than in the hedonic condition (Mutilitarian = 4.71 vs. Mhedonic = 3.72), F(1, 238) = 9.47, p < .01.

**Anticipated enjoyment.** A similar pattern emerged for anticipated enjoyment. An ANOVA revealed a main effect of social context on participants’ ratings. Participants who imagined sitting at the coffee shop with two friends thought they would enjoy the experience more than those who imagined being there alone (Mtogether = 4.95 vs. Malone = 4.38), F(1, 239) = 4.29, p = .04. Consistent with our predictions, this main effect was qualified by a significant social context × activity type interaction (F(1, 239) = 20.14, p < .001). In the hedonic condition, respondents thought they would enjoy the coffee shop experience more with friends than alone (Mtogether = 5.42 vs. Malone = 4.01), F(1, 239) = 10.05, p < .01. In the utilitarian condition, respondents did not differ in how much they thought they would enjoy the coffee shop experience alone versus with friends (Malone = 4.98 vs. Mtogether = 4.46), F(1, 239) = 2.57, p = .11. Looking at the simple effects within social context condition reveals that, not surprisingly, respondents believed that if they were with two friends, they would enjoy the experience more when not working than when working (Mhedonic = 5.42 vs. Mutilitarian = 4.46), F(1, 239) = 10.67, p = .001. However, as predicted, respondents believed that if they were alone, they would enjoy the experience more when working (Mutilitarian = 4.98) than when not working (Mhedonic = 4.01, F(1, 239) = 9.53, p < .01).

**Anticipated inferences about number of friends.** Participants who imagined sitting at the coffee shop with two friends expected others at the coffee shop to infer that they had more friends (M = 4.38) than those who imagined being there alone (M = 3.15), F(1, 238) = 34.58, p < .001. This main effect was qualified by a significant social context × activity type interaction (F(1, 238) = 9.56, p < .01; see figure 5). Simple effects tests indicate that in the hedonic condition, respondents anticipated that observers would guess they had more friends when having the coffee shop experience with friends than alone (Mtogether = 4.65 vs. Malone = 2.90), F(1, 238) = 46.41, p < .001. In the utilitarian condition, this effect was attenuated and was only marginally significant (Mtogether = 4.10 vs. Malone = 3.56), F(1, 238) = 3.43, p = .065. Looking at the simple effects within social context condition reveals that respondents thinking about sitting in the coffee shop with two friends anticipated more positive inferences by observers about...
friends in the hedonic than in the utilitarian condition ($M_{	ext{hedonic}} = 4.65$ vs. $M_{	ext{utilitarian}} = 4.10$), $F(1, 238) = 4.26$, $p = .04$. Conversely, when respondents anticipated that they were alone, they anticipated more positive inferences about friends in the utilitarian than in the hedonic condition ($M_{	ext{utilitarian}} = 3.56$ vs. $M_{	ext{hedonic}} = 2.90$), $F(1, 238) = 5.32$, $p = .02$.

Mediation. We conducted a bootstrapping test to examine whether the effects of condition on interest in having the experience at the coffee shop were mediated by participants’ beliefs about observers’ inferences about their number of friends. The bias-corrected indirect effects involving inferences about observers’ beliefs about number of friends in the hedonic condition (95% CI, .256–.895) and in the utilitarian condition (95% CI, .010–.379) were significant, indicating mediation in both conditions. However, a significant interaction effect emerged (95% CI, -.77 to -.118), indicating that the indirect effect of social context mediated by inferences was larger in the hedonic than in the utilitarian condition. We conducted a similar test for anticipated enjoyment, and the results were consistent. Again, a significant interaction effect emerged (95% CI, -.758 to -.114), indicating that the indirect effect of social context on anticipated enjoyment via inferences was larger in the hedonic than in the utilitarian condition.

Discussion

The results of study 4 replicate our prior studies, again showing that consumers are less interested in having a public-hedonic experience alone than with others. As predicted, this effect is attenuated when participants imagine having work with them while alone at the coffee shop. Participants actually predicted that they would enjoy the experience alone at the coffee shop more when doing work than when not doing work, even though the reverse was true when they imagined themselves with friends. This reversal highlights the strong role of the negative effect that observers’ inferences can have on predicted enjoyment of an activity. Consistent with this reasoning, we show that the effect of social context on enjoyment is mediated by consumers’ beliefs about observers’ inferences about how many friends they have. When sitting and having a drink, consumers expect observers to infer they have fewer friends if they are sitting alone than with two or more friends, reducing their interest in the activity and their predicted enjoyment. The effects on inferences, interest, and predicted enjoyment are attenuated when consumers imagine themselves doing work at the coffee shop.

In the next study, we examine another way to disinhibit solitary public consumption. We focus here on directly manipulating the observability of the behavior. We predict that individuals who are unaccompanied should feel more comfortable engaging in the activity when they expect their behavior will be observed by a relatively smaller number of people.

STUDY 5: INTEREST IN A PUBLIC-HEDONIC ACTIVITY AT A PEAK VERSUS OFF-PEAK TIME

In study 5, we manipulate whether participants consider engaging in a hedonic activity alone versus with two or more companions and test whether their interest in the activity depends on how many observers they think will be present. Specifically, we asked participants to rate their interest in seeing a movie at a peak (Saturday evening) or an off-peak time (Sunday evening), with the expectation that they would anticipate the theater to be more full—and their behavior to be observed by more other people—at a peak time. We expected that even if consumers generally prefer Saturday to be their movie night, they would prefer to see a movie alone on a Sunday when their behavior would be observed by fewer other people.

Design, Stimuli, and Procedures

This study used a two-cell (social context: alone vs. together) between-subjects design. A total of 378 US undergraduate students (51% male) ranging in age from 18 to 35 years (average age 20.34) completed the study for class credit as part of an introductory marketing course.

Participants in all conditions read the following instructions: “Imagine that there is a movie you would really like to see that is currently playing at a theater near you. The
ticket price is $10, and you know that it will only be playing for another week before it moves out of the theaters.” Next, participants in the alone condition read, “Suppose that no one is available to go with you to see the movie this weekend and you don’t yet have plans for Saturday or Sunday evening. Would you prefer to see the movie by yourself on the Saturday or Sunday evening?” Those in the together condition read, “Suppose that two of your friends are available to go with you to see the movie this weekend and you don’t yet have plans for Saturday or Sunday evening. Would you prefer to see the movie with your friends on the Saturday or Sunday evening?”

Dependent measures. Participants reported their preference to see the movie in a theater on a Saturday versus Sunday (1 = Strongly prefer Saturday, 7 = Strongly prefer Sunday) either alone or with two or more friends, depending on the experimental condition to which they had been assigned. They also indicated whether they would prefer to see the movie when the movie theater is very full or not very full (1 = Not very full, 7 = Very full) and whether they would like others to see them or not see them at the theater (1 = Prefer that they not see me, 7 = Prefer that they see me). Finally, they indicated whether they thought the theater would be more full and more visible on a Saturday or a Sunday (1 = Much more (crowded) visible on Saturday versus Sunday, 7 = Much more (crowded) visible on Sunday versus Saturday) and in general, whether they preferred to see a movie in a theater on a Saturday or a Sunday evening (1 = Strongly prefer Saturday, 7 = Strongly prefer Sunday).

Results

Manipulation checks. As predicted, participants thought the theater would be more full on a Saturday than Sunday evening (M = 1.80 vs. the midpoint of the 7-point scale, t = 32.85, p < .0001) and that their being at the theater would be more visible to others on a Saturday than on a Sunday (M = 2.68 vs. the midpoint of the 7-point scale, t = 13.49, p < .0001).

Interest in activity. An ANOVA with social context as the between-subjects factor was conducted on participants’ preference to see the movie on a Saturday versus Sunday night. As predicted, participants in the alone condition expressed a greater preference to see the movie in the theater on a Sunday night (M = 4.73) than did those in the together condition (M = 3.15; F(1, 374) = 45.62, p < .001). This pattern emerged even though participants in both conditions indicated that “in general” they prefer to see movies on a Saturday (rather than a Sunday) night (M = 3.21), with no difference between conditions in that preference.

Observability. Participants in the alone condition exhibited a stronger preference not to be seen while at the movie (M = 2.51) compared to those in the together condition (M = 4.19), F(1, 374) = 120.23, p < .001. Consistently, those in the alone condition indicated a stronger preference for the theater not to be very full (M = 2.52) than those in the together condition (M = 3.21), F(1, 374) = 14.06, p < .001.

Mediation. To examine whether participants’ preferences to attend a movie alone versus with others on a Saturday versus Sunday evening were guided by their desire to be seen versus unseen by others at the theater, we tested for mediation using the Hayes MEDIATE macro. The bias-corrected indirect effect of social context (alone vs. together) on preference for seeing the movie on a Saturday versus Sunday through the proposed mediator (preference not to be seen by others) was significant (95% CI, -.85 to -.27), indicating successful mediation through this path. The direct effect of social context continued to be significant (t = 4.00, p < .01) with the mediator in the model, indicating partial mediation.

Discussion

The results of study 5 provide further support for our proposed process: consumers are reluctant to engage in public-hedonic behaviors alone because they do not want to be seen by others. When consumers consider engaging in a consumption activity alone, they systematically prefer to engage in the activity when they think their behavior will be observable by fewer others. As a result, when alone, they prefer to see a movie at an off-peak time, on a Sunday, rather than on a Saturday evening, when they would normally prefer to go. Thus the number of observers who are expected to make inferences about one’s behavior moderates the effect of social context on willingness to engage in public-hedonic activities alone. This is a notable insight for service providers, who should be able to convince consumers more easily to engage in hedonic activities by themselves precisely when they have extra capacity to serve them: at off-peak times.

GENERAL DISCUSSION

Consumers often select activities through which to enjoy their leisure time, such as going to movies, restaurants, or museums, reading for fun, and watching television. In this research, we examine how interest in various activities depends on whether or not an activity partner is available. Demographic shifts that have resulted in people spending more time alone make this a particularly noteworthy question because consumers often may not have an activity partner available. Our research demonstrates two systematic effects. First, the results of studies 1 and 5 suggest that interest in solitary hedonic activities is higher when the activities will be less visible to others. This is a concern for consumer welfare because it may discourage consumers
from engaging in activities that would provide a pleasurable experience and opportunities to meet new activity partners. Second, the results of studies 1, 3, and 4 suggest that consumers are less reluctant to engage in public utilitarian activities than in public-hedonic activities. This, too, is a concern for consumer welfare because it could contribute to hyperopia, the tendency to work rather than enjoy leisure activities, which might be regretted later in life (Kivetz and Keinan 2006).

Prior research suggested diverging predictions. Although some sociologists have suggested that consumers readily engage in activities alone that they previously might have engaged in with others (e.g., Putnam 2000), research from psychology emphasizes people’s strong desire to do things with others (e.g., Baumeister and Leary 1995). Consumer research provides further evidence that people enjoy hedonic experiences more with others than alone (e.g., Raghunathan and Corfman 2006; Ramanathan and McGill 2007). Our research adds to this literature by showing that consumers have qualitatively different activity preferences when they engage in an activity alone versus when they engage in an activity with others.

Our studies suggest that an important driver of consumers’ inhibitions from partaking in hedonic-public activities alone is their concern that others will evaluate them negatively if they do. Study 1 showed that it is hedonic activities that can be easily observed by others (rather than hedonic-private or utilitarian-public activities) that prompt consumers to anticipate the most negative inferences, reducing interest in these activities when solo. Study 2 demonstrated that this inference process as well as consumers’ reluctance to engage in a hedonic-public activity (going to a movie) alone generalizes across cultures. Study 3 examined the accuracy of individuals’ forecasts about how much they will enjoy a hedonic-public experience and demonstrates that they underestimate how much they will enjoy it alone compared to with others. Study 4 showed that a cue that the activity serves a utilitarian purpose attenuates the anticipated negative evaluations and subsequent reduction in interest in the activity. Mediation tests in the first four studies indicate that believing others will make negative inferences about the number of friends they have reduces consumers’ interest in engaging in public-hedonic activities. Study 5 further highlights the underlying mechanism by showing that although participants generally preferred to see movies in a theater on a Saturday night, when they imagined being alone they preferred to go to the theater on a Sunday night, so that they would be observed by fewer others.

These results extend prior work on subjective norms (e.g., Ajzen 1991; Cialdini, Reno, and Kallgren 1991; Sheppard, Hartwick, and Warshaw 1988) to decisions consumers make about how to spend time when they are alone (vs. with others). Both the interaction between the hedonic and public nature of the activities consumers avoid when alone and mediation by negative inferences by others suggest that avoidance of public-hedonic activities when alone is not driven by a rational calculation that consumers will derive less enjoyment from the activity alone than when with a companion. Instead, our findings indicate that concern about negative evaluations by others leads consumers to refrain from engaging in hedonic activities that they would otherwise find enjoyable and want to engage in. Indeed, if predicted enjoyment of the activity when alone versus with a companion uniquely drove the effect, we would observe no difference in predicted enjoyment of a movie unaccompanied at home versus in a theater.

Similarly, we should not observe preferences to see a movie in a theater at an off-peak time when fewer rather than more other consumers are expected to be present. Because the effect is driven at least in part by anticipated evaluations made by others, the setting in which the activity takes place (public or private) and the number of anticipated observers are critical. Unfortunately, study 3 suggests that consumers overestimate how much their actual enjoyment will depend on the social context. Moreover, avoiding public settings in which solitary consumers could form new relationships and enjoy leisure pursuits may reduce consumer welfare (Baumeister and Leary 1995; Epley and Schroeder 2014; Kivetz and Keinan 2006). Encouraging consumers to enjoy solo hedonic activities at off-peak times, as suggested by study 5, may be a way to improve both consumer welfare and managerial profits.

Our results also extend to earlier work demonstrating the importance of social connectedness to consumers engaging in public consumption experiences. A recent article by McFerran and Argo (2014) shows that consumers feel they have more status when they are accompanied by others while engaging in public consumption experiences, an effect they call the “entourage effect.” This effect is mediated by perceived social connectedness. Our effect, too, is mediated by perceived social connectedness: consumers’ beliefs about the number of friends others will think they have. In fact, in a study not reported here, we used McFerran and Argo’s items to measure social connectedness and found that they are highly correlated with anticipated inferences about number of friends ($r = .75, p < .001$). Thus we believe our effect is quite complementary to the entourage effect: whereas the entourage effect is driven by being accompanied by others, our effect is driven by not being accompanied by others, and both effects are mediated by beliefs about social connectedness.

An interesting question for further investigation is what others conclude when they observe someone engaging in a public-hedonic consumption activity alone. Some work suggests that people are more forgiving of others’ behaviors than they believe others will be of their own (Gilovich, Medvec, and Savitsky 2000; Savitsky, Epley, and Gilovich 2001). For instance, people overestimate how much others
will notice their behavior, imagining that others are shining a brighter “spotlight” on them than they actually do (Gilovich et al. 2000). Indeed, when we ran a study ($N = 84$) comparing consumers’ expectations of how others would evaluate them when they engaged in a public-hedonic activity (going to a movie at a theater) alone with their evaluations of someone else who had engaged in the same activity alone, we found that participants’ evaluations of others were significantly more favorable than the evaluations they anticipated from others. Compared to evaluations that participants gave for someone else seeing a movie alone, participants expected others to evaluate themselves seeing a movie in a theater alone as less positive ($M_s = 4.17$ vs. $2.86$, $p < .001$), independent ($M_s = 6.10$ vs. $5.63$, $p = .076$), and proactive ($M_s = 4.98$ vs. $4.35$, $p = .042$), and as more unusual ($M_s = 4.93$ vs. $3.95$, $p = .006$), antisocial ($M_s = 4.81$ vs. $3.51$, $p = .001$) and strange ($M_s = 4.98$ vs. $3.76$, $p = .001$). These results suggest that consumers who engage in public-hedonic activities alone may anticipate significantly more negative evaluations from others than they will actually receive.

### Implications for Marketers

These findings have implications for marketers who seek to capture money that is otherwise being unspent due to consumers’ inhibition. For marketers, our results suggest that if they want to better tap into the market of consumers interested in hedonic experiences (dinners out, movies in theaters, concerts), they can use cues to encourage solitary consumption. One way to do this is to change norms, such as by making it clear that solo consumers are expected and welcomed. For example, event organizers could offer seating for those who will be participating solo to join with others who are also participating alone. Communal tables in a restaurant, group seating in a movie theater for solo film lovers, or reserved seating for single music lovers at a concert might facilitate interactions among solo patrons. Indeed, recent research suggests that connecting with strangers can make utilitarian experiences like commuting more pleasant than not connecting with others (Epley and Schroeder 2014), so it is likely that this would also be true for more hedonic experiences. Although consumers’ concerns about engaging in solo hedonic activities seem strong, these concerns might be attenuated if marketers make it clear that it is appropriate to engage in these behaviors, as in the marketing of the right-hand diamond ring for single women by DeBeers.

Alternatively, marketers could encourage consumers to feel more comfortable engaging in hedonic activities alone by making the activities seem more utilitarian. For example, many coffee shops make newspapers, magazines, and wireless Internet service available to their customers while enjoying their beverages. Theaters and restaurants might involve solo patrons by making the experience “collectable” (Keinan and Kivetz 2011). For example, if theaters can convince patrons to collect every performance during a season or if restaurants can convince customers to try every entrée on the menu, solo customers might feel more justified in consuming these hedonic experiences. In the present studies, there was variation in consumer perceptions of the degree to which a hedonic experience (e.g., spending time at a coffee shop or art gallery) also was utilitarian. An interesting question for future research is whether marketers can frame a neutral activity as utilitarian (vs. hedonic) to encourage solitary consumption.

### Implications for Consumers

These findings also have implications for consumers who feel limited in their hedonic pursuits by the availability of activity partners. From a consumer welfare perspective, our results suggest that enriching activities may go unexperienced unless consumers decide to take action and engage in activities that interest them, regardless of whether they have company. After engaging in such activities several times, it may become easier to do in the future (Dahl et al. 2001). We hope that by identifying a widespread inhibition to engage in public-hedonic activities alone as well as cues that attenuate this inhibition, we can encourage more consumers to go bowling—or whatever leisure activity is appealing but for which they lack an activity partner—alone.

### DATA COLLECTION INFORMATION

The first and second author supervised data collection for study 1 in the spring of 2013 and jointly analyzed the data. The second author supervised data collection for study 2 in the summer of 2014 and study 3 in the spring of 2014 and analyzed the data from both studies. The first and second author jointly supervised data collection for study 4 in the spring of 2013, and the first author analyzed the data. The first author supervised data collection for study 5 in the fall of 2014 and analyzed the data.

### REFERENCES


