

Indeterminacy and Live Television

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Why would consumers prefer live television, even when tape-delayed broadcasts provide the same sensory experience? We propose that indeterminacy is a key reason. Indeterminate consumption experiences (such as watching sports competitions live on television) unfold in ways that are not decided *ex ante*. This makes them more exciting than equivalent determinate experiences (such as watching recorded broadcasts). We offer empirical evidence for this proposition: independently of other differences between live and taped broadcasts, the indeterminacy of events made watching them live more exciting and correspondingly preferable. We conclude by discussing implications of the indeterminacy concept for consumer research.

When the exam schedule for our MBA program was announced a few years ago, furious students stormed into the MBA dean's office, demanding that an exam be rescheduled. This exam had unintentionally been scheduled such that it was to perfectly overlap with a semifinal game of the soccer world cup. The dean felt that rescheduling the exam would set a dangerous precedent. He announced a seemingly perfect solution: the exam would proceed as scheduled, and the game would be recorded and then shown in the exam auditorium as soon as the exam, and coincidentally also the game, ended. Anticipating possible objections to his plan, the dean explained that examinees would not be able to obtain any information about how the game had evolved before or while watching the recorded game (the exam auditorium plus adjacent lavatory and vending machine areas would be closed off, cell phones would not be allowed, etc.). Hence, he explained, except for the time delay, students would have the same sensory experience and uncertainty as if the exam were rescheduled. However, far from settling the issue, student protests even intensified.

A key difference between what the dean suggested and

what the students wanted is that viewers of live TV know at any time during the broadcast of the game that what will happen is not decided *ex ante*. Watching the game live is thus an indeterminate experience. In contrast, even when they do not know what has happened, viewers of a taped broadcast of the same game know that this has been decided *ex ante* (by how the game was actually played). Watching the game taped is thus a determinate experience.

This article focuses on perceived indeterminacy because it affects excitement from, and preferences for, consumption experiences. To illustrate this, we show effects of perceived indeterminacy in one domain, watching TV, as in the opening anecdote. Specifically, we present evidence that preferences for live over taped broadcasts can be accounted for by perceived indeterminacy independently of other differences between these two types of experiences. This is because perceived indeterminacy is associated with greater excitement, which enhances the appeal of experiences such as watching a live soccer match. Below, we introduce the concept of indeterminacy and explain how indeterminacy affects consumption experiences. We then present two focal studies that test our predictions and briefly describe additional studies that reinforce our conclusions.

THEORETICAL BACKGROUND

Consumption experiences are indeterminate if how they unfold is not decided *ex ante*. For example, live basketball games or talk shows are indeterminate—how they evolve is decided as they happen. On the other hand, reading novels and watching movies or recorded shows are determinate experiences because how they unfold has already been decided. Our notion of determinacy draws on the concept of causal determinism in philosophy. Determinism posits that a specific set of antecedents necessitates one and only one

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set of consequences, so that what will happen next is already decided in advance, even though no one may have the requisite skills to analyze the contingency (Earman 1986; Laplace 1814). Similarly, determinacy does not imply that consumers have any information about how the event unfolds, only about whether or not how it unfolds is decided *ex ante*, as in the opening anecdote. Thus, indeterminacy differs from uncertainty.

An experience can be indeterminate if and only if both the underlying event and the manner in which it is experienced are indeterminate. For example, an indeterminate event (such as a soccer match) loses its indeterminacy if consumers watch it after it has been played—if the broadcast is not live. A determinate event (such as a scripted talk show) provides a determinate viewing experience even if it is shown live—a consumption format that can preserve but not create indeterminacy. We further distinguish two aspects of indeterminacy, the extent to which the process by which the event unfolds is indeterminate and the extent to which the outcome of the event is indeterminate. We introduce this distinction because consumers watch some types of events mostly for their process (such as a talk show), others mostly for their outcome (such as a lottery), and yet others for both the process and the outcome (such as soccer matches). We return to this distinction in our studies.

We propose that experiences that are perceived to be indeterminate (e.g., watching an interesting sports match live) are associated with greater excitement than equivalent determinate experiences (e.g., watching a taped broadcast of the same match). This proposition is in line with research suggesting that the ability to respond to threats and opportunities in the environment requires action readiness that entails excitement (Frijda, Kuipers, and ter Schure 1989). Like other generally adaptive cues (e.g., affect as information; Schwarz 2001, 2004), perceived indeterminacy of an experience can cue such action readiness and excitement because the way the event unfolds has not been decided *ex ante*. In contrast, a determinate event does not merit action readiness, nor the excitement that accompanies it, because how such an experience unfolds has already been decided *ex ante*. So the flip side of indeterminacy is that determinate situations are associated with lesser excitement, akin to learned helplessness, where people exhibit low levels of excitement when they perceive stimulus-response contingencies they cannot control (Peterson and Seligman 1984). Another implication is that watching an outcome occurring live adds no excitement independently of the excitement from the process that generates this outcome. That is because there is no point in being action ready for an outcome that is independent of a process—affecting an outcome requires a process. Our predictions below thus refer to process rather than outcome indeterminacy.

Our empirical predictions in this article build on the notion that indeterminate experiences are associated with greater excitement. Specifically, we hypothesize that perceived (process) indeterminacy can account for a preference for live over recorded broadcasts. This is because the greater

excitement associated with indeterminate experiences enhances their appeal. Consistent with this, Brun and Teigen (1990) found that people preferred guessing the outcome of events such as a toss of a die before rather than after the events occurred (see also Rothbart and Snyder 1970) and also found the former more stimulating.

Our broader goal in this article is to introduce the concept of indeterminacy and illustrate its value for consumer research. We focus our investigation of indeterminacy on watching television, a common domain of consumption experiences, to control for diverse domain-specific factors that affect preferences for such experiences. Specifically, we present evidence that preferences for live over taped broadcasts can be accounted for by perceived indeterminacy independently of other differences between these two types of experiences. Aside from perceived indeterminacy, live and recorded broadcasts differ on other dimensions. To test our hypothesis, we must thus control for several alternative explanations derived from the literature that hinge on these differences and that can account for why consumers might prefer live TV. First, people often watch live broadcasts together with others. Such sharing of experiences may enhance their appeal (Raghunathan and Corfman 2004) because it may address a need to belong to an in-group (those who witnessed an event) or serve a social verification function (Hardin and Higgins 1996). Second, indeterminacy as an explanation is naturally confounded with impatience. Viewing experiences can be indeterminate only if they are live (a taped broadcast can provide only a determinate experience). But the earliest way to see an event is to watch it live, as it occurs. Anyone who is impatient (has a positive discount rate) should prefer watching a desirable event in real time, at the first possible opportunity, to watching the same event tape delayed, all else equal (Frederick, Loewenstein, and O'Donoghue 2002).

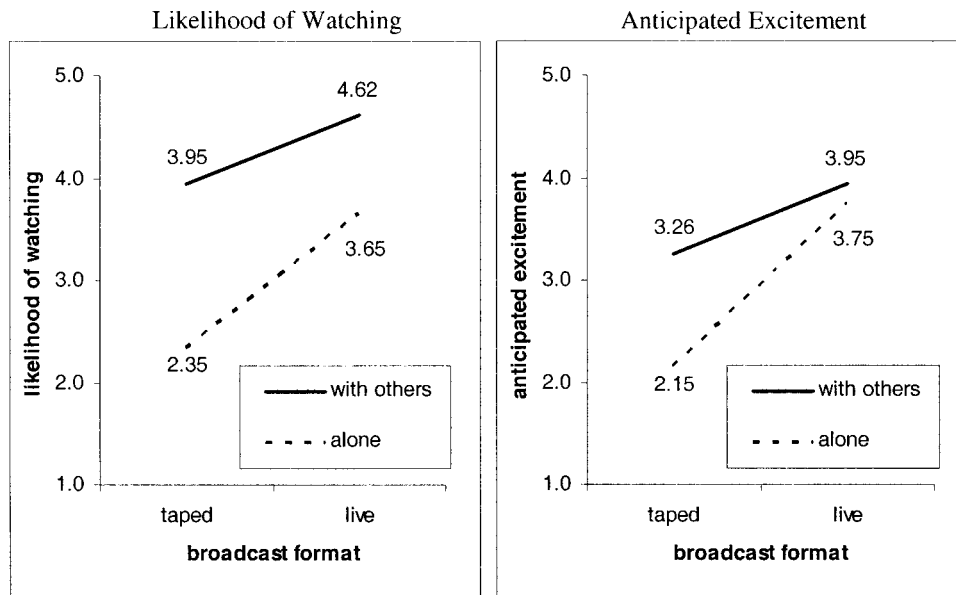
Each of these accounts, as well as others we describe later, predicts a preference for live over recorded broadcasts. In the following studies, we show that indeterminacy can account for broadcast viewing preferences independently of the alternative explanations.

STUDY 1

This study seeks evidence for a preference for live TV independent of the first alternative account, a preference for sharing experiences. If the latter causes the preference for live broadcasts, this preference should disappear when the experience cannot be shared. Furthermore, to explore whether consumers prefer live TV because it is more exciting, as the indeterminacy account suggests, we also measure anticipated excitement from watching the broadcast live or taped. Finally, as a preliminary test of the extent to which perceived process and outcome indeterminacy underlie viewing preferences, the study includes two different types of events. One, inspired by our opening anecdote, is a soccer match, an event watched for both its process and its outcome. The other is a lottery, an event typically watched more for its outcome.

FIGURE 1

STUDY 1 RESULTS FOR SOCCER SCENARIO: IMPACT OF SHARED EXPERIENCES AND BROADCAST FORMAT ON LIKELIHOOD OF WATCHING AND ANTICIPATED EXCITEMENT



Method

Respondents and Procedure. Eighty university students in Germany completed our questionnaire in return for a chocolate bar. We asked respondents to imagine two scenarios. In one scenario, they would watch the upcoming final match of the European Champion’s League, a highly anticipated game. In the other scenario, they would watch a popular televised lottery drawing for which they owned a ticket. The presentation order of the two scenarios was counterbalanced. Half the respondents were told that they would watch the match and the lottery drawing together with others, and the other half were told that they would watch the soccer match and the lottery drawing alone. Broadcast format was manipulated by telling half the participants that they would watch the game and the lottery drawing live, whereas the other half were told that they would watch the events tape delayed by a few hours because of a conflict over broadcasting rights among TV channels. This was inspired by a high-profile incident that had occurred in Germany just before the study, resulting in similar broadcast delays. Respondents were also told that they would not learn anything about how the match unfolded or about the outcome of the lottery before watching either. This was done to ensure that manipulating indeterminacy did not affect uncertainty about the event, as in the opening anecdote.

Design. The design was 2 × 2 × 2, with the factors sharing of experience (watching the game with others vs. alone, between subjects), broadcast format (live vs. taped,

between subjects), and scenario (soccer match vs. lottery drawing, counterbalanced within subjects). Dependent variables, all measured on seven-point Likert scales (0 = not at all, 6 = very), included how likely respondents were to watch each event, how excited they expected to feel watching each event as described, and how difficult it was to imagine each scenario.

Results

Soccer. As expected, an ANOVA showed that respondents who would see the match live were more likely to watch it ($M = 4.15$) than those who would see it taped ($M = 3.13$, $F(1, 76) = 4.54$, $p < .05$; see fig. 1, left). Moreover, respondents who would see the match with others were more likely to watch it ($M = 4.30$) than those who would see it alone ($M = 3.00$, $F(1, 76) = 7.69$, $p < .01$). The interaction effect of broadcast format and sharing of experience did not approach statistical significance, suggesting that indeterminacy and sharing an experience operate independently of one another. There were also no significant effects on the difficulty to imagine the scenario.

A second ANOVA showed corresponding effects on anticipated excitement. As predicted, respondents who would see the match live rated their anticipated excitement significantly higher ($M = 3.85$) than those who would see it taped ($M = 2.69$, $F(1, 76) = 9.17$, $p < .01$; see fig. 1, right; as predicted, excitement mediated the effect of broadcast format on viewing preferences). Furthermore, respondents who would watch the game with others rated their excite-

ment marginally higher ($M = 3.63$) than those who would watch the match alone ($M = 2.95$, $F(1, 76) = 3.03$, $p < .10$). Again, the interaction term was not significant.

Lottery. An ANOVA of the likelihood of watching the lottery drawing showed that respondents who would see the drawing live were no more likely to watch it ($M = 2.74$) than those who would see it taped ($M = 2.62$, $F(1, 76) = 0.06$, $p = \text{NS}$; see fig. 2, left). Respondents who would see the lottery drawing alone were more likely to watch it ($M = 3.30$) than those who would see it with others ($M = 2.07$, $F(1, 76) = 5.64$, $p < .05$). As in the soccer scenario, neither the interaction effect nor any effect of difficulty to imagine the scenario approached significance.

We found similar effects on anticipated excitement for watching the lottery drawing. Respondents did not differ in their anticipated excitement when watching the lottery drawing live ($M = 2.69$) versus taped ($M = 2.19$, $F(1, 76) = 1.37$, $p = \text{NS}$; see fig. 2, right). But respondents who would watch the lottery drawing alone rated their excitement higher ($M = 3.03$) than those who would watch it with others ($M = 1.86$, $F(1, 76) = 7.28$, $p < .01$). Again, the interaction term was not significant.

Discussion

In line with the opening anecdote, our respondents preferred watching a soccer match live rather than taped. This preference corresponded to anticipated excitement from watching the broadcast. That there was no such preference for the lottery also suggests that the preference for live

broadcasts is due to the indeterminacy of the underlying process, not the outcome of the event.

Arguing against the alternative account of shared experiences, watching the event in the presence of others did not affect participants' desire to watch the broadcast live—we found no interactions between broadcast format and sharing of experience in either scenario. Watching the event with others affected participants' overall preference for watching the event as well as their excitement, but this was independent of the phenomenon we study here.

In study 2, we manipulate the indeterminacy of an event independently of the broadcast format to further test our hypothesis. We expect that live broadcasts will be preferred only when the event is perceived as indeterminate but not when the event is perceived as determinate. In this study, we also follow up on the directional finding of different effects of outcome and process indeterminacy to further examine the role of the two subtypes of indeterminacy in affecting broadcast format preferences.

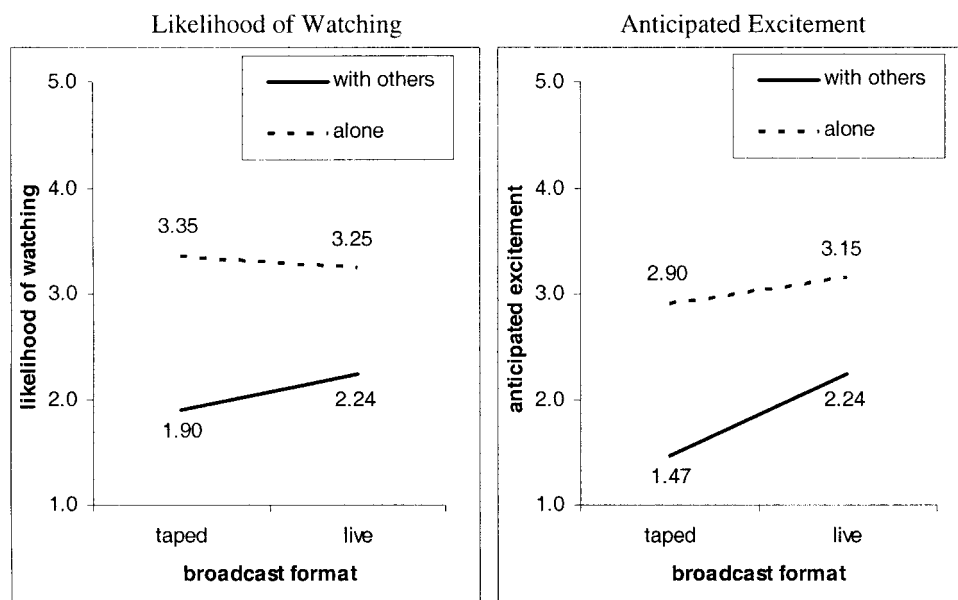
STUDY 2

Method

Respondents and Procedure. Respondents were 246 university students in Singapore who completed a brief questionnaire in return for a pen. The scenario-based questionnaire described a fictitious reality TV dating show modeled closely after a popular real one (*The Bachelorette*). In the show, an attractive single woman interacts with several attractive single men with the goal of selecting one by the

FIGURE 2

STUDY 1 RESULTS FOR LOTTERY SCENARIO: IMPACT OF SHARED EXPERIENCES AND BROADCAST FORMAT ON LIKELIHOOD OF WATCHING AND ANTICIPATED EXCITEMENT



end of the show, with whom she will go on an all expenses paid getaway. We manipulated broadcast format by telling half the respondents that the show would be broadcast live and telling the other half that the show would be filmed before being aired.

Recall that a major goal of this study was to manipulate perceived indeterminacy independently of the broadcast format. To accomplish this, we informed half the respondents that what would happen in the show would be scripted. That way, the event would be determinate because how it would unfold was decided *ex ante*. Importantly, such a scripted show could be broadcast live despite being determinate. Specifically, we manipulated perceived process indeterminacy by telling half the respondents that the contestants would act out a scripted role and telling the other half that the contestants would interact in an unplanned manner. We manipulated perceived outcome indeterminacy by telling half the respondents that they had learned from a reliable source that the woman had privately decided which contestant she would pick before the show was filmed but would reveal her choice only at the end of the show (so that the outcome would be determinate but still uncertain). We told the other half that she would decide and reveal her choice only at the end of the show.

Design. The design was $2 \times 2 \times 2$, with the between-subject factors broadcast format (live vs. taped), process indeterminacy (process determinate vs. indeterminate), and outcome indeterminacy (outcome determinate vs. indeterminate). Dependent variables, all measured on seven-point Likert scales (0 = not at all, 6 = very), included how likely respondents were to watch the show, how excited they expected to feel watching it as described, and how easy it was to imagine the scenario. To assess whether participants understood the instructions, we included manipulation checks of whether the broadcast was live or taped, whether the outcome had been decided before the show was filmed or during the show, and whether the process was indeterminate (unscripted) or determinate (scripted) at the time of the broadcast.

Results

Manipulation Checks. For each manipulation check, we ran a logistic regression with the independent variables broadcast format, process indeterminacy, outcome indeterminacy, and all interaction terms. Each regression revealed a main effect of the respective manipulated factor but no effects of the other factors or interactions (broadcast format: $\chi^2(1) = 54.90, p < .001$, all other $\chi^2(1) < 2.6, p = \text{NS}$; process indeterminacy: $\chi^2(1) = 90.79, p < .001$, all other $\chi^2(1) < 2.2, p = \text{NS}$; outcome indeterminacy: $\chi^2(1) = 79.65, p < .001$, all other $\chi^2(1) < 0.5, p = \text{NS}$). Overall, 182 participants showed that they understood the instructions.

Likelihood of Watching. An ANOVA of the likelihood of watching the show revealed a marginally significant main effect of broadcast format and significant main effects of

outcome and of process indeterminacy. Respondents were more likely to watch the show when it was shown live ($M = 3.05$) rather than taped ($M = 2.58, F(1, 182) = 3.37, p < .10$), when the outcome was indeterminate ($M = 3.02$) rather than determinate ($M = 2.57, F(1, 182) = 4.16, p < .05$), and when the process was indeterminate ($M = 3.24$) rather than determinate ($M = 2.34, F(1, 182) = 18.89, p < .001$).

As expected, these main effects were qualified by an interaction of broadcast format and process indeterminacy ($F(1, 182) = 4.25, p < .05$). Importantly, this interaction and planned contrasts showed that respondents were more likely to watch the show live rather than taped when the process was indeterminate (i.e., when contestant behavior was unscripted; $t(182) = 2.81, p < .001$). In contrast, when the process was determinate (i.e., when contestant behavior was scripted), respondents were as likely to watch the show live as taped ($t(182) = 0.66, p = \text{NS}$; see fig. 3). This pattern supports our prediction of the effect of process indeterminacy on viewing preferences. As expected, there was no significant interaction of broadcast format and outcome indeterminacy ($F(1, 182) = 0.299, p = \text{NS}$). These effects were not due to differences in the ease of imagining the scenarios, which was not affected by any of the manipulated factors.

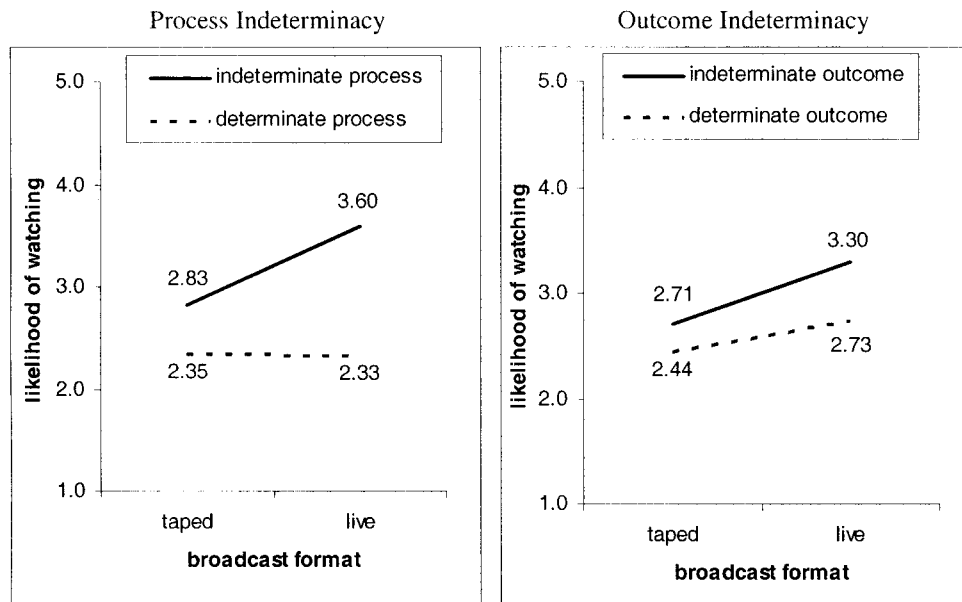
Anticipated Excitement. A second ANOVA showed corresponding effects on anticipated excitement. Significant main effects indicated that respondents rated their anticipated excitement higher when the show was broadcast live ($M = 3.33$) rather than taped ($M = 2.67, F(1, 182) = 8.27, p < .01$), when the outcome was indeterminate ($M = 3.23$) rather than determinate ($M = 2.73, F(1, 182) = 5.14, p < .05$), and when the process was indeterminate ($M = 3.53$) rather than determinate ($M = 2.42, F(1, 182) = 35.74, p < .001$). Importantly, these main effects were qualified by an interaction of broadcast format and process indeterminacy ($F(1, 182) = 11.35, p < .001$) but not by an interaction of broadcast format and outcome indeterminacy ($F(1, 182) = 1.05, p = \text{NS}$; see fig. 4; as predicted, excitement mediated the interaction effect of broadcast format and process indeterminacy on viewing preferences). The interaction of broadcast format and process indeterminacy indicates that respondents anticipated greater excitement from watching the show live rather than taped when the process was indeterminate (contestant behavior was unscripted; $t(182) = 4.50, p < .001$). When the process was determinate (contestant behavior was scripted), there was no difference in anticipated excitement from watching the show live versus taped ($t(182) = 0.34, p = \text{NS}$).

Discussion

This study demonstrates that the perceived indeterminacy of broadcast events creates a preference for live over taped broadcasts. We show this by manipulating perceived indeterminacy independently of the broadcast format, using a

FIGURE 3

STUDY 2 RESULTS: IMPACT OF BROADCAST FORMAT AND MANIPULATED INDETERMINACY ON LIKELIHOOD OF WATCHING



different operationalization of the indeterminacy construct. When viewers know that the broadcast event is determinate—when contestants' behavior has been planned before the game show is produced—they do not prefer a live broadcast. This study also replicates our finding in study 1 of corresponding effects of indeterminacy on anticipated excitement. We also expected and found the preference for watching the show live only when the process, but not the outcome, was indeterminate. Furthermore, as predicted, excitement mediated the interaction effect of broadcast format and process indeterminacy on viewing preferences. Finally, we found main effects of both types of perceived indeterminacy on the likelihood of watching the show and on excitement. Informal follow-up interviews suggested that was because people feel that unplanned behavior is more exciting and desirable independently of whether it is viewed live. Indeed, consumers like recordings of live concerts, for example, even though those performances can be more "flawed" than studio recordings. Conversely, consumers do not like lip syncing in live concerts even though the performance is likely to sound "cleaner."

Study 2 also rules out several other alternative accounts. One is a variant of the shared experiences account—that viewers may feel they are sharing the experience virtually with those watching the event elsewhere at the same time, either in the arena or on TV. Another suggests that watching an event live gives viewers "bragging rights" that they saw it when it occurred. Yet another account, psychological proximity, builds on the notion that the featured event is temporally and hence psychologically closer during live broadcasts, making the live format preferable (Lewin 1951; Trope

and Liberman 2003). Finally, another is impatience—people want to watch a broadcast as soon as possible. Unlike indeterminacy, none of these accounts predicts the interaction we found, that is, a preference for live TV when the event that is broadcast is indeterminate versus when it is not (e.g., if the contestants follow a script).

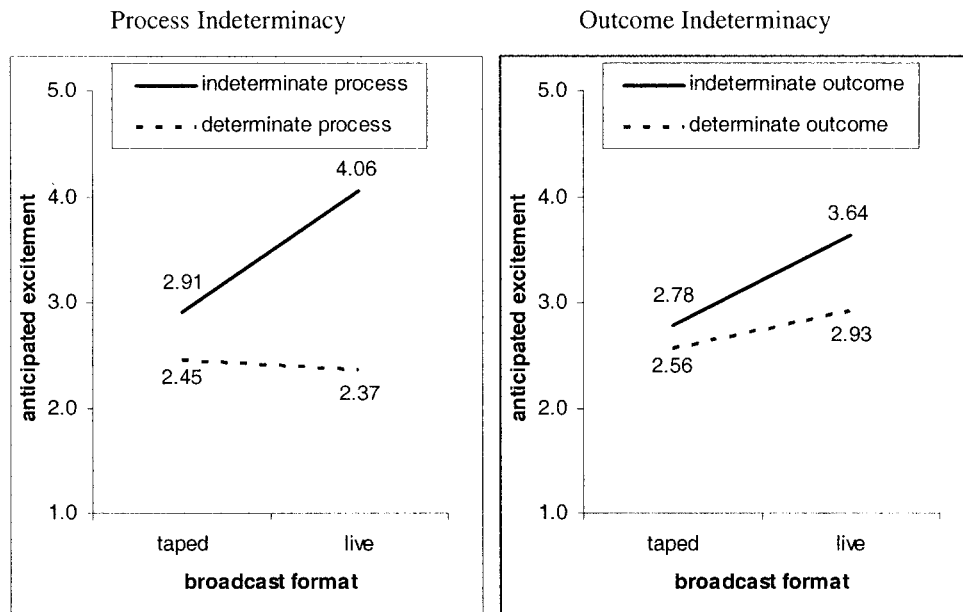
Because impatience is a prominent alternative account, we ran an additional study that pitted it against indeterminacy (cf. Platt 1964). Note that viewing experiences must be live to be indeterminate, but watching an event live also provides the earliest opportunity to see it. Thus, the two accounts are naturally confounded. To break this confound, a scenario described a taped broadcast of one game occurring before the live broadcast of another, otherwise equivalent, game. Respondents rated their preference for the two (counterbalanced) games on a scale ranging from 1 ("I prefer game X") to 5 ("I prefer game Y"). Controlling for interest in the two games, participants preferred to watch a given game more strongly when it was to be shown later but live (the indeterminate format; $M = 3.14$) than when it was shown earlier but taped (the determinate format; $M = 1.89$), contrary to the impatience account prediction ($F(1, 104) = 17.98, p < .001$). Logit analysis with preference ratings categorized as choices also showed a significant preference for the live game ($\chi^2(1) = 17.98, p < .001$).

GENERAL DISCUSSION

We believe that the concept of perceived indeterminacy, the focus of this article, can help explain excitement from, and preferences for, consumption experiences. To illustrate

FIGURE 4

STUDY 2 RESULTS: IMPACT OF BROADCAST FORMAT AND MANIPULATED INDETERMINACY ON ANTICIPATED EXCITEMENT



this, we derived and tested empirical predictions that cannot be made by, or even conflict with, extant theories. Specifically, we proposed that the perception of indeterminacy can account for preferences for live and taped broadcasts independently of other differences between these formats. Study 1 demonstrated a preference for watching a soccer match, but not a lottery drawing, live on TV. This preference corresponds to the anticipated excitement generated by the different broadcast formats and is independent of a preference for sharing experiences with others. It might be argued that measuring excitement and preference in the same instrument might have created a carryover effect, potentially limiting the interpretation of our excitement data. But differences between excitement and preference ratings suggest that this is not a major concern. In study 2, we tease apart the effect, a preference for live broadcasts, from its underlying explanation, a preference for indeterminacy. We manipulated the perceived indeterminacy of the process and outcome of the event independently of the broadcast format. Our findings reveal a preference for live broadcasts only when the process but not the outcome is perceived as indeterminate. This preference again corresponds to anticipated excitement, which supports our claim that perceived process indeterminacy makes live TV more exciting and thus preferred.

One remaining alternative explanation for wanting to watch an event such as a sports competition live is that it may give viewers with a stake in its outcome an illusory sense of being able to influence that outcome (Langer 1975)—as if by magic they could help their team beat its

opponent. Notice that this points to a theoretical distinction between the indeterminacy and illusion-of-control accounts in that the former focuses on the process underlying the event, whereas the latter focuses on (controlling) its outcome. Illusion of control predicts that consumers prefer live broadcasts when they have a stake in the outcome (e.g., soccer fans who want a favored team to win would prefer to watch the game live). A study in a related research project pitted this illusion-of-control account against the indeterminacy account. We asked soccer fans to imagine that they would watch an upcoming soccer match either live or taped. We asked half these fans how likely their team was to win or tie and the other half how likely their team was to lose. Fans who would watch the match live judged their team more likely to win *and* more likely to lose than those watching the match taped. These results conflict with illusion of control because live viewers should have judged their favored team more likely to win and *less* likely to lose than viewers of the taped broadcast. The findings are consistent with indeterminacy, which suggests that the excitement generated by the live broadcast enhanced both probability judgments.

Another remaining alternative explanation is that consumers dislike taped broadcasts if the delay is beyond their control. For example, they may enjoy taped as much as live broadcasts if they freely choose to do something else at the time of the live broadcast. We tested this possibility in another study by informing one group of participants that they could watch an upcoming soccer match live on TV. We told two other groups that they could watch only a taped broad-

cast of the game either because of a conflict in broadcasting rights (beyond their control) or because they wanted to attend a party. The likelihood of watching the game was significantly higher for the live broadcast. More importantly, there was no difference between the two taped broadcast conditions. Thus, the reason for watching the broadcast taped did not matter.

Interestingly, our studies show that perceived indeterminacy has significant effects even though comparable indeterminate and determinate experiences do not differ at a sensory level or in terms of uncertainty. For example, consumers would have to be informed that a broadcast is live and that the participants are not following a scripted role. Absent such knowledge, and when the process indeterminacy is not salient, consumers must rely on subtle cues, such as imperfections in the underlying event, to infer its indeterminacy. Future research should explore these and other cues that trigger the perception of indeterminacy.

An important theoretical implication is that indeterminacy may shed new light on well-known findings of illusion of control. A prevalent paradigm for demonstrating illusion of control is to show that people experience exaggerated beliefs of success in chance situations (Thompson, Armstrong, and Thomas 1998). But extant demonstrations of illusion of control in terms of such an exaggerated confidence in obtaining the desired outcome have relied only on measures of success. To our knowledge, subjective probabilities of failure have not been examined in this context. In our study testing illusion of control, we observed exaggerated probabilities for both success and failure. Such a pattern of both enhanced optimism and enhanced pessimism is in accordance with our perceived indeterminacy account but is at odds with illusion of control, which predicts more optimism and less pessimism. Thus, some previous demonstrations of illusion of control via enhanced optimism may instead have reflected excitement from indeterminacy that also led to enhanced pessimism (that went undetected because it was not measured).

We offer insight into when and why consumers may feel the way our students did in the anecdote at the outset of the article, preferring live to recorded broadcasts even if watching the live broadcast comes at a cost. Our MBA students picked a fight with the MBA dean. In other cases, consumers sacrifice convenience (e.g., European basketball fans stay up well past midnight to watch NBA games live, even though games are often replayed the following day) or money (e.g., pay-per-view events, even when replays can be watched for free just hours later). More generally, our research suggests what types of events may benefit from live broadcasting; live broadcasts of programs such as talk and game shows (e.g., *Jeopardy*) and reality TV (e.g., *Survivor*) are more likely to appeal to audiences when they are perceived as indeterminate. This should also make them better advertising vehicles, which is especially important given today's shrinking advertising audiences. If viewers perceive the underlying process as determinate (e.g., wrestling competitions or reality shows suspected of being

staged), programs might not benefit from live broadcasting. Note that all the events we studied included an element of competition or winning/losing (soccer match, lottery, dating show). We predict that indeterminacy of events without such an element (e.g., music concerts) will also affect broadcast preferences if there is an element of process indeterminacy involved, as in jazz improvisation (although such live broadcasts may be preferred because of other differences between live and taped broadcasts). But these speculations should be empirically verified by future research.

In conclusion, in this article we introduce the concept of perceived indeterminacy and show that it is associated with greater excitement, which can influence consumer preferences. We believe that indeterminacy can help explain how people interpret their consumption experiences and how it alters their experienced utility in a variety of domains such as performing arts, vacations, and gaming (see West, Huber, and Min 2004). But because of substantial domain-specific differences, we leave it to future research to explore these effects.

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