

The Foresight Effect:
Local Optimism Motivates Consistency and Local Pessimism Motivates Variety

Adelle X. Yang

Oleg Urminsky

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Adelle Xue Yang (Adelle.Yang@chicagobooth.edu) is a PhD Candidate, and Oleg Urminsky (oleg.urminsky@chicagobooth.edu) is an Associate Professor of Marketing and the Charles M. Harper Faculty Fellow, at the University of Chicago, Booth School of Business, Chicago, IL, 60615. The authors thank Christopher Hsee, Ran Kivetz, and Ann McGill for their valuable feedback and suggestions on the current version of the manuscript. The authors also thank Paul Thomas for dedicated help on data collection, and Daniel Bartels, Yangjie Gu, Reid Hastie, Jane Risen, Christian Wheeler, and attendees at the Association for Consumer Research, Behavioral Decision Research in Management, Society for Judgment and Decision Making, Summer Decision Making Conference, and Choice Symposium conferences for helpful comments on an earlier version of the research. Financial support from the John Templeton Foundation and from the James M. Kilts Center for Marketing at the University of Chicago Booth School of Business is gratefully acknowledged.

Abstract

Consumers sometimes prefer to repeat their past choices, while other times the same consumer prefers to try something new. We demonstrate that a consumers' situational future outlook, that is, local optimism or pessimism about an imminent outcome, can systematically affect the sequential consistency of consumer choices. Specifically, local optimism increases sequential choice consistency, while local pessimism increases sequential variety seeking. We test this "Foresight Effect" in two experimental paradigms, using both real and hypothetical consumer choices, across six studies. We first establish the basic effect of situational future outlook on sequential choice consistency (Studies 1 & 2). Then, we provide evidence that differences in the preference for self-continuity underlie the effect (Studies 3, 4, & 5). Last, we extend this effect to choices between broadly defined usual and novel consumer products (Study 6). Across the studies, we rule out differences in mood, causal attribution, and perceived control as alternative explanations. These findings have theoretical implications for the relationship between future-oriented cognition and consumer behaviors, as well as broad managerial implications for when consumers will be more apt to repeat past purchases or more open to novel product adoption.

“Very often a change of self is needed more than a change of scene”

--A.C. Benson

When do people prefer to repeat their past choices, and when are they open to trying something new? Sometimes, consumers appear to be loyal, visiting Starbucks every day for a cup of Mocha, and ordering cashew chicken from Szechuan Palace every Monday night. Other times, they seem fickle, suddenly dropping their habits and choosing products they had not tried before, without a clearly discernable reason. These fluctuations in preferences don't just reflect individual differences – most of us frequently exhibit both behavioral patterns.

Prior researchers have typically resorted to individual differences to explain why people change their behaviors, even when the available options have remained the same. We propose that a consumer's tendency to choose the usual option or the novel option can be systematically influenced by their seemingly unrelated “situational future outlook.” that is, optimism or pessimism about an imminent outcome, often based on prior events. Thus, we propose that when people's circumstances signal a desirable future outcome, they often tend to feel like “staying the course” and will prefer to repeat their usual choices, even when those choices have no believed or actual causal effect on the future outcome. By contrast, when circumstances bode future disappointment, people will often instead have an impulse to “change the path,” resulting in more novel choices.

Understanding the tendency to repeat usual choices or switch to novel options is a key challenge for research on consumer decision-making and loyalty (Simonson 1990). Consumers typically defect at rates of 10% - 30% per year (Reichheld 1996), for reasons that almost half of marketers don't feel they understand well enough (Acxiom survey 2012). Some consumers are simply more prone to defection, and researchers have identified a number of relevant idiosyncratic characteristics, including need for variety (Van Trijp et al. 1996), open-mindedness

(Jacoby 1971), and innovativeness (Hirschman 1980). By contrast, we suggest that fleeting contextual factors, especially those that influence consumers' situational future outlook, are an important and understudied influence on consumers' preference between repeating past purchases and new product adoption.

We propose a novel framework, illustrated in Figure 1, in which consumers' situational future outlook affects their preference for self-continuity, which affects the consistency of their sequential consumer choices. We hypothesize that when a consumer is locally optimistic (i.e. optimistic about a specific upcoming event), preference for self-continuity increases. This preference, in turn enhances the likelihood of sequential choice consistency, resulting in more choices of usual options. By contrast, when the consumer is locally pessimistic, preference for self-continuity decreases, which in turn enhances the likelihood of sequential variety seeking, resulting in more choices of novel options.

Next, we discuss the prior literature and provide a theoretical framework for the predicted "Foresight Effect", and then distinguish key constructs of our proposed framework from related constructs. After that, we present six studies in which we test the Foresight Effect and the underlying psychological mechanism.

THEORETICAL DEVELOPMENT

Situational future outlook: local optimism and local pessimism

Future-oriented cognition is a hallmark of human decision-making and behavior (Mead 1934, Skinner 1938). People spontaneously form anticipations of future outcomes based on their local situational context, and take actions to reduce the discrepancy between what they currently anticipate and the desired states of the world (Bandura 1991, Scheier and Carver 1985).

We define *local optimism* (vs. *local pessimism*) as positive (vs. negative) anticipatory states about imminent outcomes, shaped by causal inferences from available information, including past outcomes and situational characteristics. Situational future outlook (i.e. local optimism or pessimism) is therefore distinct from both dispositional optimism (a generally stable individual trait, Scheier and Carver 1985) and long-term optimism (a general expectancy state, Buchanan and Seligman 1995). While dispositional and long-term optimism may partially contribute, situational future outlook involves context-dependent inferences about specific future outcomes.

When their prior efforts have been successful, people will often be locally optimistic, inferring from the prior outcomes that future outcomes will also be successful (Gilovich, Vallone, and Tversky 1985, Burns 1994), whereas past failures will often lead to local pessimism about future outcomes. However, the inferences that shape situational outlook depend on the local context, including the perceived nature of the task (Van Boven et al. 2009). In particular, the opposite inferences can be made for predominantly chance-based outcomes, with greater local optimism after prior failure and greater local pessimism after prior success (e.g., the gambler's fallacy, Clotfelter and Cook 1993).

The effect of situational future outlook on preferences for self-continuity

The construct of self-continuity stems from the conceptualization that self-concept is malleable and fluid (Markus and Kunda 1986, Kunda and Sanitioso 1989), and that the self over time can be construed as consisting of “a temporal sequence of partially overlapping selves” (Parfit 1984). Recent research has found, for example, that beliefs about self-continuity can impact how connected one feels towards the future self, and hence influence how people make

decisions for the future (Bartels and Urminsky 2011, 2015). This line of research highlights the possibility that the perceived continuity between past and future selves can shape consumer behaviors.

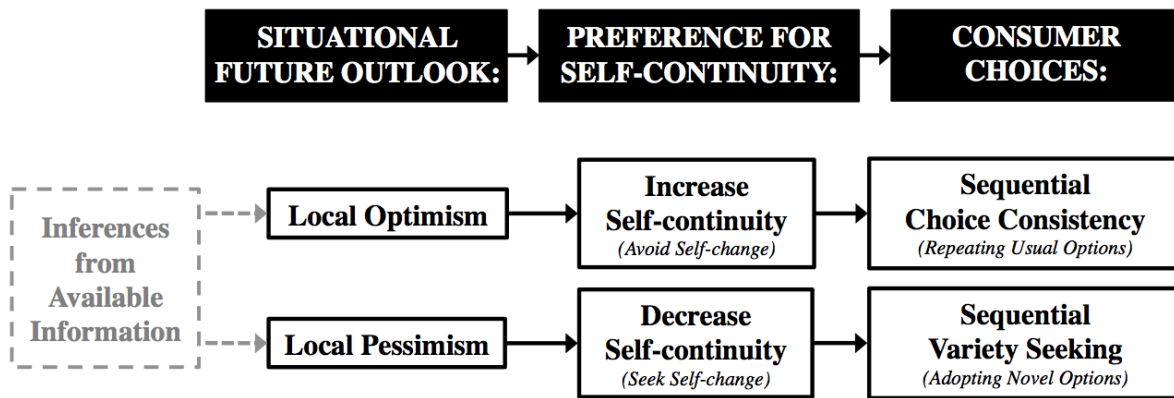
Building on the same philosophical ground from a different perspective, we propose that anticipations about the future not only impact a person's *perceptions* of self-continuity, but also *preferences* about self-continuity. People frequently encounter future uncertainty regarding personal outcomes, from family to career, from wealth to health, from one's performance at work to whether one can beat the traffic and get home in time for a favorite show. Given that human cognition is fundamentally egocentric (Piaget 1929), future uncertainty will generally be viewed from the perspective of the self. From a person's own vantage point, uncertainty about one's own outcomes may feel fundamentally tied to the self, with how one feels, thinks, and behaves inextricably linked to how one's own future will unfold. In fact, abundant research has shown that, because people's own inner states are the most immediately available to themselves (Pronin 2008), they tend to interpret observed outcomes as relating to their own intentions and behaviors rather than to external mechanisms (Wegner and Wheatly 1999) or other people's behaviors (Ross and Sicoly 1979), and over-estimate the personal influence they have over the surrounding world (Langer 1975, Ross, Greene and House 1977, Gilovich et al. 2000).

Thus, perceiving future outcomes as being rooted in the self can give rise to the intuition that change in future outcomes begins with self-relevant change, as if self-continuity is associated with how much the future will be connected to the past, even without any direct causal link.

The intuition that self-continuity can be associated with the trajectory of future outcomes may stem from experiences where self-continuity did have causal impact on the outcome.

Skinner (1948) illustrated how such intuitions can be overgeneralized from cases of causal contingency to those lacking causal contingency with an insightful example: a bowler who continues to twist his arm and shoulder after releasing the ball, as if he were still exerting control over the movement of the ball down the alley. He remarked, “...*the connection (between his movement and the path of the ball) was established before the ball left the bowler’s hand, but ... some relation survives. The subsequent behavior of the bowler may have no effect upon the ball, but the behavior of the ball has an effect upon the bowler*” (Skinner 1948, 171). In this example, the blower’s focal goal to guide the ball towards a certain destination, together with his close monitoring of the ball’s rolling course, lead to extended intentions to continue his initial motions, as if his motions could contribute to the future path of the ball.

FIGURE 1. FRAMEWORK: SITUATIONAL FUTURE OUTLOOK IMPACTS SEQUENTIAL CONSUMER VARIETY SEEKING VIA PREFERENCE FOR SELF-CONTINUITY.



Thus, we propose that local optimism will enhance people’s preference for self-continuity. By contrast, local pessimism will instead decrease people’s preference for self-continuity, even when the continuity of self per se cannot plausibly have any causal impact on the future outcome (Figure 1).

Consider John, who is being considered for a promotion at work. If John has been having success at work recently and feels optimistic about an upcoming promotion, then he may favor self-continuity, feeling like staying with his usual habits and behaviors, even for decisions completely unrelated to his performance at work. However, if John has instead had difficulties at work and feels pessimistic about the upcoming promotion decision, then he might instead be in the mood for self-change, driven by a sense that some change in the self, breaking away from the usual “John”, somehow feels more right.

To sum up, peoples’ motivation to achieve a desirable future outcome makes them actively contemplate probable future outcomes and form an instantaneous situational future outlook, either optimistic or pessimistic. Different situational outlooks can, in turn, yield different preferences regarding self-continuity. Specifically, when the imminent future seems promising, we feel like staying the course; when the imminent future bodes disappointment, we feel like breaking away. Moreover, as we discuss next, differences in one’s preference for self-continuity will lead to differences in the consistency of consumer choices.

Self-continuity preferences shape sequential choice consistency

A large literature has documented fundamental links between the content of consumer choices and their sense of self (Belk 1988, Kleine, Kleine and Kernan 1992, Urminsky et al. 2014). While single choices reflect consumers’ sense of self at that time, sequential variations in consumer choices can relate to the dynamic implications of consumer’s sense of self (Kim and Drolet 2003). This relationship could even be independent of the content of the choices. It has been posited in consumer culture theory, for example, that repeating consumer choices and holding on to past possessions can enhance self-continuity (Csikszentmihalyi 1993, Kleine and

Baker 2004) and “stabilize who we are” (Csikszentmihalyi 1993). By contrast, discarding past possessions can prepare the self for future changes and life transitions (Young 1991).

Prior research on consumer preferences between consistency and variety have largely focused on making multiple choices at one time for immediate consumption (Kahn 1995, Ratner and Kahn 2002) or contrasting the decision processes involved in making simultaneous choices or sequential choices for future consumption over time (Simonson 1990, Read and Lowenstein 1995). In particular, when people make a sequence of choices, each directly before consumption, the degree of consistency or variety in those choices is less affected by their beliefs about future preferences or decision complexity, yielding less variety (Simonson 1990). However, our framework suggests that the variety-seeking motive may also arise in sequential choices, depending on the situational outlook.

Specifically, we propose that differences in spontaneous preferences for self-continuity, due to situational future outlook, can influence the sequential consistency of consumer choices. When consumers prefer self-continuity, they will be more likely to stick to their usual routine purchasing choices, resulting in sequential choice consistency. By contrast, when consumers feel an impulse for self-change they will be more likely to change from their routine choices and adopt novel options, resulting in sequential variety seeking (figure 1).

Consider once more the previous example of John, who is anticipating a promotion decision at work. John is a particular fan of action movies, and is now making a choice between an action movie and a drama movie at the movie theater. We propose that the movie he chooses to see may partly depend on his situational outlook. If John is optimistic about the promotion, he will prefer to maintain self-continuity, and as a result, will be more likely to repeat his usual choice and watch another action movie. However, if John is pessimistic about the promotion, he

will prefer to disrupt self-continuity, and will be more likely to choose an option that represents self-change, such as a novel drama movie.

Testing the Foresight Effect

Next, we test the proposed framework in six experimental studies. We first establish the basic Foresight Effect in Studies 1 and 2 that situational future outlook uniquely affects the sequential consistency of common consumer choices, using a direct manipulation paradigm. This paradigm manipulates the difficulty of an initial task, to directly induce differences in situational outlook. Then in Studies 3, 4 and 5, we investigate the proposed role of preference for self-continuity as the underlying psychological mechanism for the Foresight Effect. Last, we generalize our findings to choices between broadly defined usual and novel consumer choices, in Study 6.

We designed our studies to test specifically the effects of local optimism and pessimism as distinct from other types of optimism. Therefore, we also measure dispositional optimism (i.e., a positive explanatory style, measured with the LOT-R scale, Scheier, Carver and Bridges 1994) and long-term state optimism (i.e., feeling confident about general life outcomes in the upcoming year) in most of our studies. In addition, we measure common confounds of optimism, including mood (Weisse 1992, Peterson 2000, Salovey et al., 2000, Kluemper et al. 2009), causal attribution (Scheier and Carver 1985), and personal agency or perceived control (Aspinwall 2005, Bruininks and Malle 2005).

Moreover, in Studies 5 and 6, we introduce a novel cross-manipulation paradigm, based on the recency-belief literature (Van Boven et al. 2009). In this paradigm, we manipulate both prior outcomes and causal theories (e.g., skill vs. chance), to systematically induce different

situational outlook. This approach separates the valence of situational outlook from the valence of prior outcomes, and more directly precludes common confounds of optimism, including affect, causal attribution, and perceived control. Across the studies, we also distinguish the Foresight Effect from deliberate causal strategies or superstitious rituals.

STUDY 1: SITUATIONAL FUTURE OUTLOOK INFLUENCES SEQUENTIAL VARIETY SEEKING

In Study 1, we directly test the effect of situational future outlook on sequential variety seeking. The study consisted of two separate tasks, a consumer survey involving reading online media articles, and a Scrabble-type game. Participants alternated between two tasks. After the first online media choice, they played one round of the Scrabble game, then they made a second choice among online media, and the final round of the game, in which they could win a prize if they performed well. A pretest confirmed that participants see the choice of magazines as self-relevant, as suggested by prior research (e.g., Kleine et al. 1993). The pretest results for stimuli in all the studies are reported in the web appendix.

We made the Scrabble game either easy or difficult, to manipulate situational outlook, and we coded consistency or inconsistency between the first and second online media choices as the key dependent variable. Our framework predicts that when participants feel optimistic about winning the game, they would prefer to read an article from the same media as before. By contrast, when they feel pessimistic about winning the game, they would prefer to change and read an article from a different media source than before.

Method

We recruited 197 adult consumers ($M_{\text{age}} = 35.8$, 39% Male) from a screened online subject pool (Mechanical Turk) for a general consumer survey that paid \$1.50, and assigned them to one of two (Outlook: Optimistic vs. Pessimistic) between-subjects conditions.

We introduced two seemingly unrelated tasks, an “Online Media Consumer Survey” and a “Scrabble Game”, using different fonts to reinforce the perceived difference. Participants experienced actual consequences from all choices in the study.

Participants first read in the “Online Media Consumer Survey”:

“In this survey, ... we'll show you four different online newspapers and magazines. You may choose one. This choice should reflect what you'd like to read the most at the moment. After you make the choice, we'll ask you to read one short excerpt from the online newspaper or magazine your chose, and ask you what you think of the excerpt.”

Participants chose among four different online sources: *National Geographic*, *The Wall Street Journal*, *E!Online*, and *Scientific American*. A brief article from the chosen source was then displayed for 60 seconds minimum, each with a logo, a headline, three paragraphs, and one picture (see web appendix for sample excerpts). Following the article, participants answered a few filler questions about the article they had just read.

Next, participants read before entering the “Scrabble Game”:

“In the game, we'll give you seven random letters to form some commonly used words. You'll have one practice round where you may familiarize yourself with the rules and the level of difficulty of the game, and one prize round where you can win an extra \$1 in addition to the base pay of the survey.”

We then gave participants 90 seconds to generate words from the letters: “PBFAHCE”. We made winning the Scrabble game either easy (participants had to generate 4 words) or difficult (10 words). At the top of the game page, a countdown timer was displayed. When time was up, the next page automatically loaded within 10 seconds.

Next, participants took the second part of the “Online Media Consumer Survey,” in which they made the focal choice, selecting an online source for a second article to read. We informed participants that whether or not they chose the same source as their first choice, they would read a new article from their chosen source.

Last, participants played the Scrabble Game for the prize round, with the same level of manipulated difficulty as in the practice round. After that, they filled out manipulation check questions and additional items, including perceived differences between the first and second chosen articles, mood, long-term state optimism, believed purpose of the study, and demographic questions.

Results

Screening. The study took about 15 minutes on average. Since the test of our hypothesis requires participants to pay attention to the instructions and to have English language proficiency, we excluded participants who were not native English-speakers (4.1%) or who failed a baseline attention check question (1.0%). Results including these participants were similar. We used the same screening criteria in all studies (web appendix Table 1).

Manipulation checks. The Scrabble game was chosen as a task in which the outcome would be seen as mostly determined by skill, rather than by chance, so that the participants’ anticipations for the future outcome would be based on their prior performance (Burns 2004,

Critcher and Rosenzweig 2014). Indeed, participants' ratings confirmed that they saw performance in the game as mostly determined by skill (on a scale from chance (0) to skill (100); $M = 72.8$, $SD = 21.3$, $t(186) = 14.6$, $p < .001$ compared with the scale mid-point of 50).

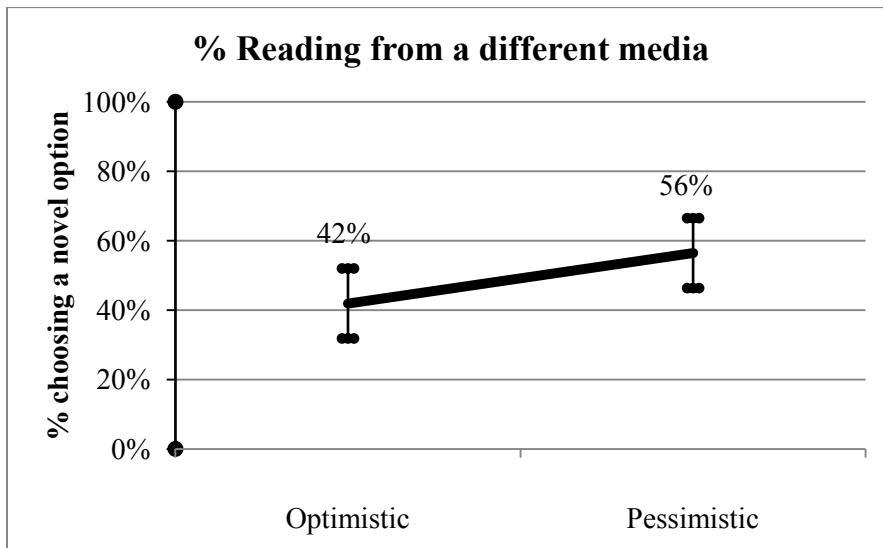
Indeed, participants playing the easy version reported at the end of the study feeling more optimistic about winning before the prize round ($M = 71.6$, $SD = 26.4$), compared with those playing the difficult version ($M = 55.9$, $SD = 29.1$, $F(1,185) = 14.9$, $p < .001$).

We used the same manipulation checks throughout Studies 1 to 4, and found similar results in all these studies (web appendix Tables 2 and 3).

Sequential variety seeking. As predicted, more participants in the Pessimistic Condition chose a different online media source for their second choice (56.4%, $SD = .50$), compared with those in the Optimistic Condition (41.9%, $SD = .50$; ANOVA $F(1,185) = 3.95$, $p < .05$, $\eta_p^2 = .021$; figure 2). In other words, participants playing the difficult version of the game and who were therefore more pessimistic about the outcome showed more sequential variety seeking in their unrelated magazine choices. In contrast, those playing the easy version, who were more optimistic about the outcome, exhibited more sequential choice consistency.

Content of choices. Consistent with our interpretation that switching choices reflects a preference to experience change, participants who chose a difference magazine in their second choice rated the two articles they read as more different ($M = 2.74$, $SD = .44$, on a 3-point scale) than did those who chose from the same magazine ($M = 1.73$, $SD = .83$; $t(185) = -10.5$, $p < .001$). Moreover, the effect was due to the overall difference in sequential variety seeking between Optimistic and Pessimistic conditions, rather than a change in preferences for any specific magazines. The individual magazine choice proportions between the first and second choices were similar in both conditions.

FIGURE 2. THE FORESIGHT EFFECT: SITUATIONAL FUTURE OUTLOOK INFLUENCES SEQUENTIAL CHOICE CONSISTENCY FOR ONLINE MEDIA (STUDY 1).



Error bars depict 95% Confidence Intervals.

Mood. Mood was not affected by the manipulation of game difficulty ($M = 5.08$ vs. 5.16 , $SD = 1.09$ vs. 1.12 , $F(1,185) = .061$, n.s.). While mood did correlate with local optimism ($r = .30$, $p < .001$), the effect of the manipulation on sequential choice consistency persisted ($F(1, 184) = 3.9$, $p < .05$) when controlling for mood. Therefore, differences in mood could not explain the Foresight Effect. We will discuss the role of these factors in more detail in the general discussion, as the effects of these factors varied in the subsequent studies, and do not explain the Foresight Effect.

Causal contingency belief. Did participants believe that the choice of media could have a causal impact on their performance in the Scrabble game? Contrary to this possibility, the vast majority (85%) of participants indicated that the media survey could not affect their performance in the Scrabble game. The 7.5% who believed it could have an effect provided reasons that were completely irrelevant to the purpose of the manipulation (e.g., “*I think it relaxed me from the stress.*”). Thus, the effect does not seem to be driven by explicit magical thinking (James,

Handelman and Taylor 2011). We probed participants for the same question in the following studies as well, and consistently found no evidence for magical thinking (web appendix Table 4).

Discussion

In sum, the results of Study 1 demonstrate that local optimism or pessimism about a specific imminent outcome can influence whether consumers repeat a recent consumer choice or choose a novel option instead. In particular, local optimism induced sequential choice consistency, whereas local pessimism induced sequential variety seeking.

STUDY 2: THE FORESIGHT EFFECT IS FUTURE-ORIENTED

In Study 2, we test whether the Foresight Effect is future-oriented, as proposed. If the future outcome is resolved before the second choice is made, then circumstances will no longer motivate participants to either increase or decrease self-continuity, and the Foresight Effect will be eliminated. The study uses a 2 (Outlook: Optimistic vs. Pessimistic) x 2 (Choice: Before Prize vs. After Prize) between-subjects design, using a similar experimental procedure as in Study 1.

Method

We recruited participants ($N = 431$, $M_{\text{age}} = 34.6$, 46%Male) from the same online subject pool as Study 1, for \$2.50. We used a “Movie Preference Consumer Survey” instead of the “Online Media Consumer Survey” in Study 1. The dependent variable was the sequential consistency of choices among Action, Romance, Drama, and Animation movie trailers. For example, a participant who chose “Action” in the first choice and “Animation” in the second

choice watched the trailer for “Avengers: Age of Ultron” before the practice round of the Scrabble game, and watched the trailer for “Minions” before the prize round of the Scrabble game (full details in the web appendix).

We again manipulated situational outlook by making the Scrabble game easy or difficult. In addition, we embedded the second movie choice either before the prize round of the Scrabble game (as in Study 1), or after the prize round, to manipulate the presence of future-oriented motivation.

At the end of the study, participants filled out manipulation check questions and scales including mood, long-term optimism, dispositional optimism (Scheier et al., 1994), general self-efficacy (Schwarzer and Jerusalem 1995), self-monitoring (Lennox and Wolfe 1984), self-concept clarity (Campbell et al. 1996), believed purpose of the study, and demographic questions.

Results

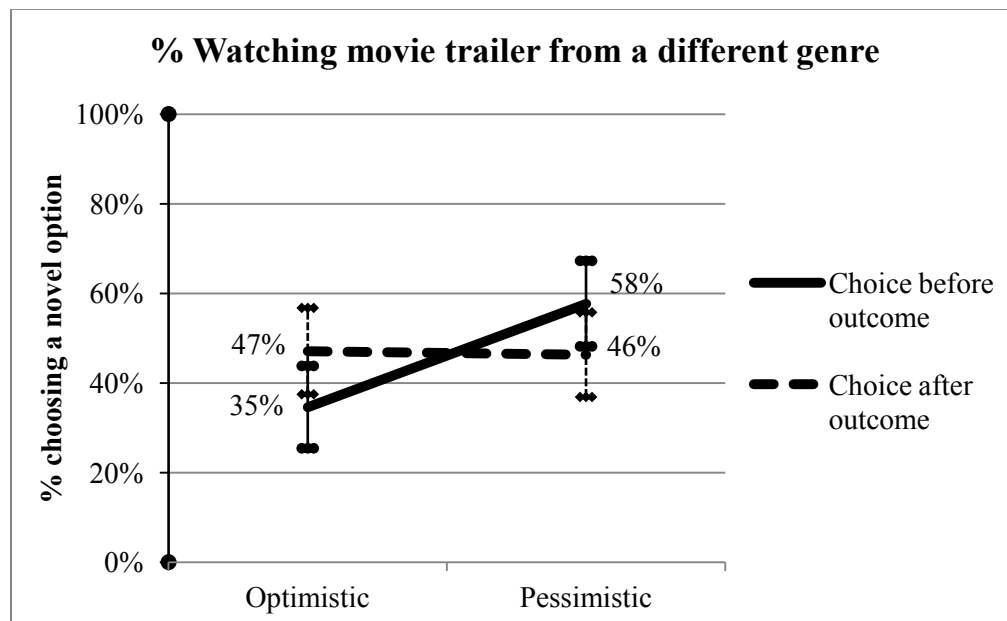
Based on the attention check and language questions, we excluded 11 participants. The manipulation checks confirmed that the game was seen as skill-based, that participants had expected more positive outcomes in the Optimism Conditions than in the Pessimism Conditions, and that they did not believe that their choice of movie would affect their performance in the game (web appendix Tables 1-4).

Sequential variety seeking. We replicated the Foresight Effect for participants facing outcome uncertainty when making their second movie choice. Participants in the Pessimistic Condition were more apt to choose a novel movie genre (57.7%), compared with those in the Optimistic Condition (34.6%, $F(1,206) = 11.7$, $p < .001$, $\eta_p^2 = .054$; figure 3). In other words,

local pessimism induced more sequential variety seeking while local optimism induced more sequential choice consistency, as in Study 1.

By contrast, participants who made their second choice after the prize round was already completed, and therefore did not face future uncertainty, chose similarly in the Optimistic and Pessimistic conditions (47.1% vs. 46.3%, $F(1,210) = .014$, n.s.; figure 3). ANOVA analysis revealed a significant interaction between situational outlook and whether the future outcome was pending ($F(1,416) = 6.13$, $p = .014$, $\eta_p^2 = .015$).

FIGURE 3. THE FORESIGHT EFFECT IS MITIGATED WHEN FUTURE UNCERTAINTY IS RESOLVED (STUDY 2).



Error bars depict 95% Confidence Intervals.

Additional measures. We included three measures of optimism at the end of the study, including local optimism at the time of decision, long-term optimism, and dispositional optimism. The three measures correlated with each other (all $r_s > .268$, $p < .001$). However, controlling for local optimism, neither long-term optimism nor dispositional optimism had an

effect on sequential choice consistency in the experimental conditions ($F(1,205) = 2.25$ and 2.47 , n.s.). Furthermore, the effect of the manipulation on sequential choice consistency persisted when controlling for long-term and dispositional optimism. Finally, neither measure moderated the effect of situational outlook on sequential choice consistency.

The other measures, including mood, self-efficacy, self-monitoring, or self-concept clarity, did not have separate effects on sequential choice consistency and did not moderate the Foresight Effect, in the present or subsequent studies.

Discussion

In Study 2, both participants facing future uncertainty and those facing no future uncertainty received the same feedback about prior performance, but we only observed the Foresight Effect among those who faced future uncertainty. Therefore, it is situational outlook for the future outcome, rather than mere feedback on one's performance, that drives the Foresight Effect.

In Study 1 and Study 2, we have established the basic Foresight Effect predicted by our framework. Next, we will examine the role of preference for self-continuity as the underlying psychological mechanism for the effect. First, in Study 3, we identify the self-relevance of choices as a necessary condition for the effect. In Studies 4 and 5, we test the direct effect of situational outlook on the preference for self-continuity.

STUDY 3: SELF-RELEVANCE OF CHOICES MODERATES THE EFFECT

Some choices are particularly relevant to one's sense of self, for example, choosing to listen to one's favorite music (Berger and Heath 2007). By contrast, making a choice not involving one's own preferences, such as regarding another person's favorite music, is less self-relevant.

We have proposed that the observed differences in sequential choices consistency were due to differences in the preference for self-continuity. Thus, when a choice is less relevant to one's sense of self, even though differences in situational outlook will still lead to different preferences for self-continuity, preferences for self-continuity will not affect sequential choice consistency. Therefore, we predict that the Foresight Effect will be mitigated when the choices are less self-relevant.

To test these predictions, in Study 3, we compare choosing music from a list of one's own favorite musicians, with choosing from a list of the favorite musicians of a family member who has different musical tastes. We posit that, when choosing among one's own favorite music, sequential consistency would be perceived as enhancing self-continuity, while sequential variety would be perceived as reducing self-continuity. By contrast, when choosing among the family member's favorite music, neither sequential consistency nor variety would be perceived as reflective of one's own self-continuity. Therefore, the Foresight Effect would be reduced when people make choices among the favorite musicians of a family member.

Method

We recruited participants ($N = 204$, $M_{\text{age}} = 31.0$, 61% Male) in a research lab in the downtown area of a Mid-western city, and paid each participant \$4. The study had a 2 (Outlook: Optimistic vs. Pessimistic) x 2 (Choice: Own vs. Other's Music) between-subjects design.

The experimenter asked each participant to take part in two ostensibly unrelated studies: a "Music Attitude Survey", and the "Scrabble Game" used in the earlier studies. The two studies were installed on two adjacent desktop computers in the same experiment room, displayed in different templates and fonts. The experimenter told participants that, since both studies would involve delays, they should alternate between the two. He instructed participants to begin with the music survey, then do the practice round of the Scrabble game, and then complete the second half of the music survey and the prize round of the Scrabble game last.

The "Music Attitude Survey" first asked participants to think about their favorite music genres, and list three distinct musicians from different genres. Then, participants were asked to think of a family member with different musical tastes, describe the person's relationship to themselves, and list three favorite musicians of the person from different genres. Thus, every participant listed six musicians, in the same order.

The survey then gave participants access to a large online music library for 3 minutes, during which they would choose a song by one of the musicians they had listed and listen to it. The survey randomly assigned participants to two conditions. Participants in the Own-Music Condition chose among their own favorite musicians, while participants in the Others'-Music Condition chose among musicians liked by the family member. After listening to the song, participants answered filler questions and then read on the screen that data was being processed and the second part of the music survey would take one to two minutes to load.

Following the experimenter's initial instructions, participants moved over to the adjacent computer to start the "Scrabble Game," identical to the one used in Study 1, in which they were assigned to either an easy or difficult version of the game. After the practice round of the Scrabble game, the game asked them to wait while the prize round of the game was being loaded, prompting participants to return to the second half of the music survey, which had loaded by then.

The music survey gave participants another 3 minutes to access the online music library. This time, the survey reminded participants of the three musicians they had listed, and asked them to indicate their preference between repeating the prior experience: "*I would listen to the same musician's same piece of music*", and opting for a novel option "*I would listen to a different musician's music (write the name of the musician below): _____*". This choice was our main dependent variable.

Upon making the choice, participants listened to the chosen song and answered filler questions and demographic information to complete the music survey. Last, they finished the prize round of the Scrabble game, and filled out the same additional measures as in Study 2.

Tests of Self-Relevance

We tested the assumption of the study design, that choice of own music would be more self-relevant compared with choice of another's music. Participants (N = 56) first generated two lists of musicians, based on the same instruction as in the "Music Attitude Consumer Survey". Then they indicated the degree to which switching would feel like a change of the self, and the degree to which repeating would feel like consistency of the self, for each list, on 10 point scales. They also indicated the degree to which switching and repeating would feel like change and consistency for the selected family member, for both lists of musicians (web appendix).

The results validated our assumptions that choices reflecting own preferences are perceived to be more self-relevant. Participants indicated that repeating one's own music reflected more consistency to the self ($M_{\text{Own}} = 7.0$, $SD = 2.1$, $M_{\text{Others}} = 4.8$, $SD = 2.7$, $t(55) = 4.1$, $p < .001$), and switching among own music reflected more change to the self ($M_{\text{Own}} = 6.0$, $SD = 2.1$, $M_{\text{Others}} = 4.5$, $SD = 2.9$, $t(55) = 3.2$, $p < .005$), compared with the corresponding actions on other's music. Moreover, participants also indicated that, for the family member, repeating their own music reflected more consistency to themselves, and switching among their own music reflected more change to themselves.

In addition, participants rated the perceived variety among each list, on 7-point scales, and reported similar degrees of perceived variety for both lists of musicians ($M_{\text{Own}} = 4.66$, $M_{\text{Other}} = 4.41$, $t(55) = .90$, n.s.). Therefore, the predicted mitigation of effect in the Other's-Music Conditions would not be attributable to a lack of variety among listed musicians. In sum, these test results support the assumptions that self-relevance is the key difference between the Own-Music and Other's-Music Conditions.

Results

Manipulation check. Participants reported listening to their own favorite musicians more frequently than the favorite musicians of the family member ($M = 5.89$ vs. 3.25 on a 7-point scale, $SD = 1.41$ vs. 2.00 , $F(1,188) = 107.7$, $p < .001$).

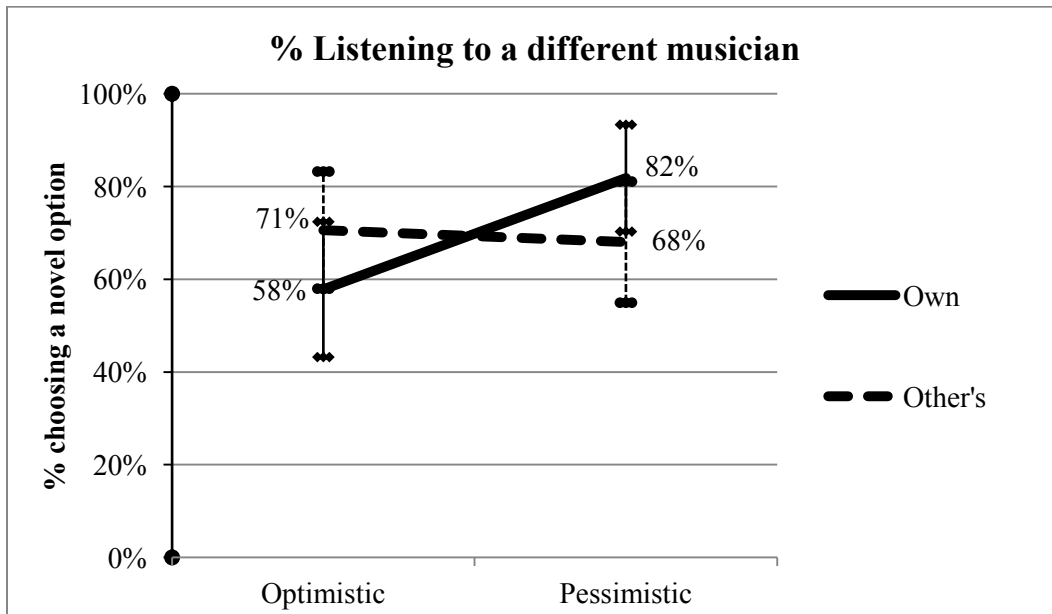
Musicians of choice. All participants listed six musicians, three of their own favorites and three favorites of the family member. For example, one participant listed “*Electric Light Orchestra*”, “*Rihanna*”, and “*Handel*” for herself, and “*Kenney Chesney*”, “*Nickle Creek*”, and “*Boyz II Men*” for her sister. Then, she first chose to listen to “*Shine A Little Love*” by Electric

Light Orchestra. For the focal second choice, she chose to switch musical artists, and listened to “Where’er You Walk (Semele)” by Handel. All participants were able to find songs from their chosen musician.

Sequential variety seeking. In the Own-Music Conditions, where the choice was highly self-relevant, the situational outlook manipulation influenced participants’ choice consistency. More participants chose a song by a different artist in their focal second choice in the Pessimistic Condition than in the Optimistic Condition (81.8% vs. 57.8%, $F(1,87) = 6.38$, $p < .05$, $\eta_p^2 = .068$; figure 4), exhibiting a higher inclination for sequential variety seeking.

By contrast, in the Other’s-Music Conditions, where the choice was non-self-relevant, situational outlook did not affect participants’ choice consistency (68.0% vs. 70.6%, $F(1,99) = .078$, n.s.). Overall, self-relevance of the choice moderated the effect of situational outlook on sequential choice consistency (ANOVA $F(1,186) = 4.00$, $p < .05$, $\eta_p^2 = .021$).

FIGURE 4. SELF-RELEVANCE OF THE CHOICE OF MUSIC MODERATES THE FORESIGHT EFFECT (STUDY 3).



Error bars depict 95% Confidence Intervals.

Discussion

The results from Study 3 further corroborate our proposition that situational future outlook can influence the sequential choice consistency of causally unrelated consumer choices, via preference for self-continuity. We replicated the Foresight Effect in another common consumer context, choice of music, when the choice was among one's favorite musicians, reflective of one's self-continuity, but not when the choice was among another person's favorite musicians, and was hence less relevant to the chooser's sense of self.

STUDY 4: PREFERENCE FOR SELF-CONTINUITY MEDIATES THE EFFECT

Thus far, we have investigated how situational outlook influences sequential choice consistency. In the present study, we directly test the role of preference for self-continuity underlying the Foresight Effect.

Method

This study had 2 (Outlook: Optimistic vs. Pessimistic) between-subjects conditions. We recruited participants ($N = 418$, $M_{\text{age}} = 34.4$, 50% Male) from the same subject pool as Study 1, and paid participants \$ 2.50. Each participant made an initial choice among movie genres (as in Study 2) and played either the easy or difficult version of the Scrabble game. The primary dependent variable was a 6-item Preference for Self-Continuity (PSC) Scale.

After completing the first half of the movie survey and the practice round of the Scrabble game, participants read the six statements of PSC, and indicated the degree to which they agreed with each statement, from "strongly disagree" (1) to "strongly agree" (5). Among the six PSC

items, three stated a preference for self-continuity, such as “*I feel like staying the same right now*”, while the other three stated a preference for self-change, such as “*I would like to experience something different now*”, for which the scores were reverse-coded (web appendix). After completing the PSC, participants finished the second half of the movie survey and the prize round of the Scrabble game.

Results

Preferred Self-Continuity. The PSC items showed strong cross-item reliability (Cronbach’s alpha = .86). Consistent with our framework, participants scored higher on the PSC in the Optimistic Condition than in the Pessimistic Condition ($M = -.11$ vs. $-.49$, $SD = .77$ vs. $.72$, $F(1, 418) = 27.2$, $p < .001$). In other words, local optimism induced preference for self-continuity, while local pessimism induced preference for change.

Sequential Variety Seeking. Replicating earlier studies, participants were more likely to choose a new movie genre in the Pessimistic Condition than in the Optimistic Condition (50.5% vs. 41.0% $SD = .50$ vs. $.49$, $F(1, 423) = 3.84$, $p = .05$, $\eta_p^2 = .009$). Measuring the intermediate construct of preference for self-continuity seems to have weakened the behavioral consequence on choice consistency, yielding a substantially smaller difference in choice consistency between the two conditions than in prior studies. Nevertheless, we tested the corresponding meditation model.

Mediation. First, we confirmed the effect of the situational outlook manipulation on sequential choice consistency in a simple regression ($\beta = .095$, $t = 1.96$, $p = .05$). Second, we confirmed that the manipulation influences preferences for self-continuity ($\beta = -.379$, $t = -5.22$, $p < .001$). Third, preference for self-continuity predicted sequential choice consistency ($\beta = -.120$, t

= -3.83, $p < .001$). Finally, in a multiple regression predicting sequential choice consistency using both situational outlook and PSC, we found a significant effect of PSC ($\beta = -.112$, $t = -3.45$, $p < .001$) and a reduced effect of situational outlook ($\beta = .053$, $t = 1.07$, n.s.). Overall, using a bootstrap Sobel test (Preacher and Hayes 2004), we found a significant indirect effect of situational outlook on sequential choice consistency by PSC (indirect effect $\beta = .177$, 95% CI = [.07, .33]).

Discussion

In Study 4, we tested the link between situational outlook and preference for self-continuity. We find that local optimism yielded stronger preferences for self-continuity than did local pessimism. These differences in the preference for self-continuity also predicted sequential choice consistency for movie trailers. Moreover, we found a significant indirect effect of the manipulation on choice consistency, explained by the preference for self-continuity..

In the next study, we test the role of preference for self-continuity more directly, using a writing task where participants can choose to write about different or same aspects of themselves.

STUDY 5: MEASURE PREFERENCE FOR SELF-CONTINUITY BEHAVIORALLY

In Study 5, instead of measuring self-reported preference for self-continuity, we use a behavioral measure to directly test the effect of situational outlook on preferences for self-continuity. We give participants options to write about themselves, and examine what they choose to write about. According to our framework, people feeling optimistic will be more apt to

write about the same aspect of the self, while participants feeling pessimistic will be more apt to write about a different aspect of the self. Moreover, we introduce a novel cross-manipulation experimental paradigm, in which we leverage a difference between skill and chance causal beliefs to dissociate local optimism and pessimism from positive and negative initial outcomes.

Prior research has documented that the inferences people make from past to future depend on the nature of the task (Van Boven et al. 2009). In particular, when a task involves perceived skill (as in the Scrabble task), recent outcomes are seen as more likely to repeat in the future (e.g., the hot-hand fallacy; Gilovich, Vallone, and Tversky 1985, Burns 1994). In these contexts, recent successes lead to local optimism for future outcomes, while recent failures lead to local pessimism, as shown in the prior studies. By contrast, when the task is seen as based on chance, recent outcomes are generally believed to reverse in the future (e.g., the gambler's fallacy, Clotfelter and Cook 1993). For these kinds of tasks, people anticipate that random outcomes will “balance out” even in a short sequence (Tversky and Kahneman 1971). Thus, recent failures can lead to local optimism for future outcomes, while recent successes can lead to local pessimism, reversing the relationship between prior outcomes and situational outlook in the prior studies.

We designed a ball-rolling game, which is causally ambiguous, and described the task as primarily involving either skill or chance. We therefore anticipated that the same pattern of recent outcomes would systematically lead to either local optimism or local pessimism, depending on the description of the primary mechanism as skill or chance.

This cross-manipulation paradigm provides several unique benefits. First, this design separates participants' situational outlook from the valence of the initial outcomes. For example, recent failure could lead to either local pessimism (in the Skill-belief condition, per “hot-hand”),

or local optimism (in the Chance-belief condition, per “gambler’s fallacy”). Furthermore, this paradigm also separates local optimism and pessimism from other factors, including causal attributions (skill vs. chance), perceptions of personal agency (more vs. less), and perceived control (high vs. low), all of which have been discussed as common confounds in prior research on optimism (Aspinwall 2005, Bruininks and Malle 2005). Therefore, this paradigm helps rule out these confounds as alternative explanations of the Foresight Effect.

Method

We recruited participants ($N = 79$, $M_{\text{age}} = 30.6$, 51% Male) in a research lab in a large mid-western city, and paid \$3 each. A single research assistant conducted two seemingly unrelated studies with each participant individually: a “Self Identity Survey” and a “Ball Rolling Game”.

Participants first filled out a “Self Identity Survey”, in which they were asked to list three different aspects of the self:

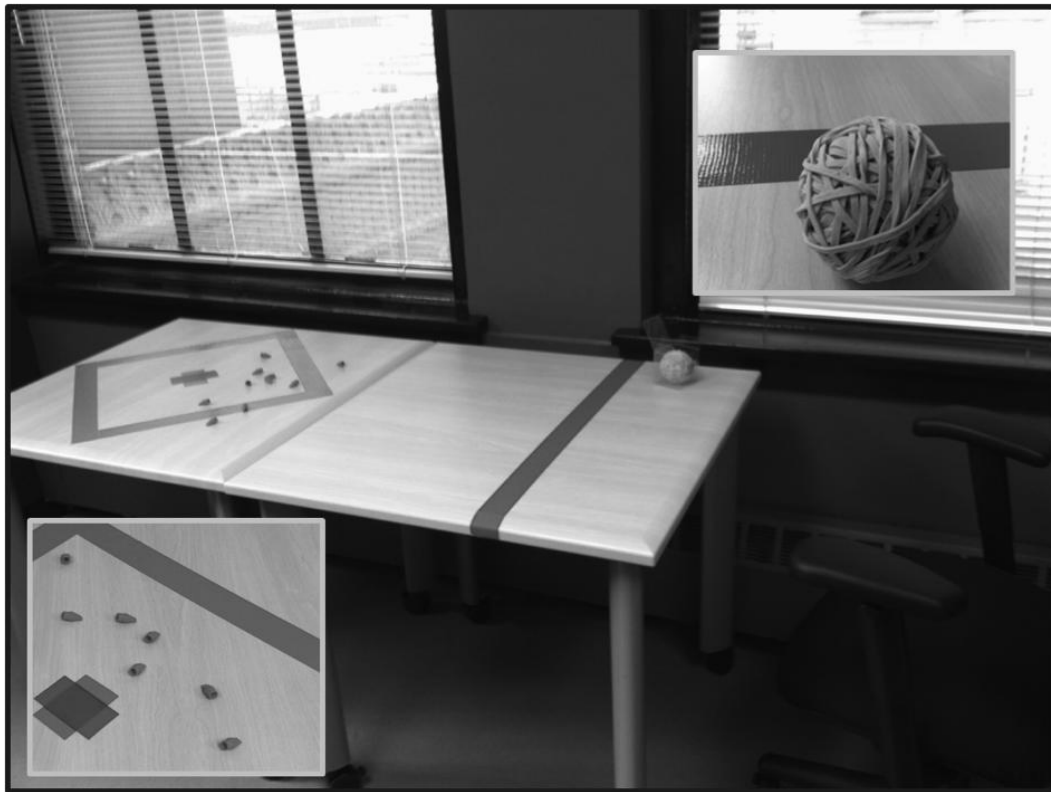
“People have multiple aspects of self-identity. For example, a person may describe herself as a first-year medical student, a daughter, a firm environmentalist, and so on. Please list at least three different aspects of your identity.”

Next, participants were asked to choose one of the listed aspects and briefly describe it.

The experimenter then showed each participant the ball rolling game. In the game, the experimenter instructed participants to roll a rubber-band ball across a table, aiming for a large square marked on the table (figure 5). Aiming and using the proper amount of force primarily involved skill, whereas the irregular shape of the ball and rubber erasers randomly scattered on the table made the outcome unpredictable and also partially subject to chance.

After one practice roll, participants were told they would play seven rolls in the game and could win a prize of \$1 by scoring at least four times. Once three consequential rolls had been completed, the experimenter asked the participant to stop and fill out a brief feedback survey about their impressions of the game. As part of the feedback survey, participants read a paragraph emphasizing either the role of skill or chance in the game (web appendix).

FIGURE 5. DESIGN OF THE BALL ROLLING GAME IN STUDY 5.



After that, the experimenter asked participants to finish the rest of the “Self-Identity Survey” before resuming the game, which contained the main dependent variable:

“Now please again take some time to think about your multiple aspects of self. Please choose one of your multiple aspects and describe yourself in detail about one of them below. What would you like to write about?”

- A. *I'd like to write more about the identity aspect I have described earlier.*
- B. *I'd like to write about a different identity aspect of myself: _____.”*

Participants then wrote a paragraph on the chosen aspect of self, and went on to play the last four rolls of the game, completed potential covariate measures and demographic questions, and received performance-based payment.

Pretest of the situational outlook manipulation

We first pre-tested the intended effect of recent outcomes (success vs. failure, within-subjects) and causal beliefs (skill vs. chance, between-subjects) on situational outlook, by separately recruiting participants (N = 61) online, for \$1.50 each.

In the survey, participants first saw pictures of the game and read the basic rules, and then read the same additional information stressing either the role of skill or chance in the game, as in the main study. The survey then asked participants to imagine that they had tried three times and had either three hits or three misses in a row (counterbalanced within-subjects). Next, participants rated how optimistic or pessimistic they would be about the next outcome in either case, using a sliding bar from “very pessimistic” (1) to “very optimistic” (10).

Consistent with our predictions, participants felt relatively optimistic after recent successes in the Skill-belief Condition (M = 6.30, SD = 2.37), and after recent failures in the Chance-belief Condition (M = 6.38, SD = 2.04). By contrast, participants felt pessimistic after recent failures in the Skill-belief Condition (M = 5.09, SD = 2.35), and after recent successes in the Chance-belief Condition (M = 5.88, SD = 2.00). ANOVA revealed the predicted interaction between information about recent outcomes and manipulation of causal beliefs on participants' situational outlook ($F(1, 59) = 6.82, p < .05, \eta_p^2 = .12$), validating the cross-manipulation

paradigm in the context of the ball-rolling game. Specifically, the manipulation reliably dissociated local optimism and pessimism from positive and negative prior outcomes.

Main Study Results

Suspicion check. Since the study was conducted in a laboratory setting where multiple studies were run simultaneously, we carefully probed if participants suspected a relationship between the purportedly unrelated “Self Identity Survey” and the “Ball Rolling Game”. Most participants (95.9%) did not indicate any suspicion, but four participants suspected that the two studies were somehow related. They were therefore excluded from analysis, although results including them were similar (web appendix Table 4).

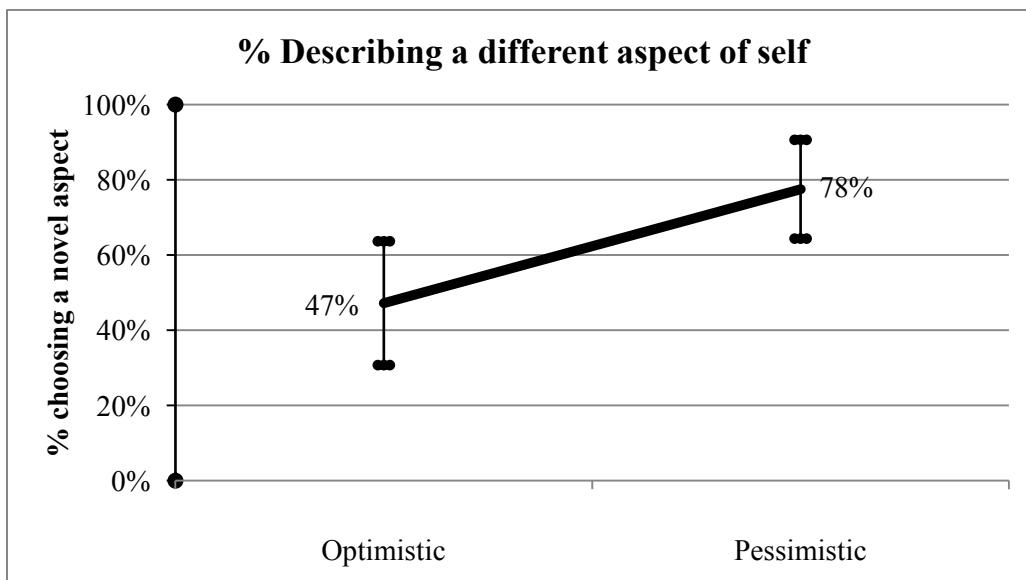
Manipulation check. Participants believed more in the role of skill in the Skill-belief Conditions, and less in the Chance-belief Conditions ($M = 5.19$ vs. 4.16 from $1 =$ “primarily chance” to $7 =$ “primarily skill”, $F(1,77) = 9.8$, $p < .005$).

Game performance. In the first four rolls, just over half of the participants did poorly, with zero or one hit (57.9%), below the success rate needed to win the reward. Just under half did well, with two or more hits (42.1%). No performance difference was found between the Skill-belief and Chance-belief conditions ($M = 3.20$ vs. 2.75 , $t(74) = 2.23$, $n.s.$).

Content of writing. Our participants listed a variety of aspects of self in the initial survey. For example, one participant described himself as a “reader, cyclist, and foodie”, while another listed “artist, engineering student, only child”. After the mid-game break, 37.2% of all participants chose to elaborate on the same aspect of the self, while 62.8% of them chose to write about a different aspect of the self.

Self-continuity. We coded participants as either experiencing local optimism (doing well in the Skill-belief Condition or doing poorly in the Chance-belief Condition) or local pessimism (doing poorly in the Skill-belief Condition or doing well in the Chance-belief Condition). We found that about 77.5% of local pessimism participants chose to elaborate on a different aspect of self, whereas less than half of the local optimism participants (47.2%) chose to elaborate on a different aspect of self ($F(1,74) = 8.06, p < .01, \eta_p^2 = .098$). In addition, ANOVA yielded the predicted interaction between the manipulation of causal beliefs and the number of successes (ANOVA $F(1,72) = 4.89, p < .05$; figure 6). Thus, manipulated situational outlook systematically generated different preferences for self-continuity.

FIGURE 6. SITUATIONAL OUTLOOK (RECODED FROM CAUSAL BELIEFS AND PRIOR PERFORMANCE) GENERATED DIFFERENT OUTCOMES OF SELF-CONTINUITY (STUDY 5).



Error bars depict 95% Confidence Interval.

Content analysis of writing. In order to validate that the writing choices reflected differences in preferred self-continuity, we analyzed the content of their writing. We asked an independent coder to rate the difference between the two descriptions from “very similar” (1) to “very different” (5). The results confirmed that for participants who chose to elaborate on the

same aspect of self, their second writing was similar to the first ($M = 2.22$, $SD = .80$), and for participants who chose to describe a different aspect of self, their second writing was different from the first ($M = 4.76$, $SD = .60$, $t(74) = 15.7$, $p < .001$).

Subsequent performance. Those who exhibited the Foresight Effect did not outperform others (1.64 vs. 1.65 hits out of four, $t(74) = -.052$, n.s.), substantiating the lack of causal relationship between the choice of writing and performance in the ball rolling task.

Discussion

These results directly demonstrate the effect of situational outlook on preferred self-continuity. When situational inferences generate local optimism, people prefer a high degree of self-continuity. By contrast, when situational inferences yield local pessimism, people prefer disruption in self-continuity. Moreover, the use of the cross-manipulation paradigm provides more precise evidence that the results are due to local optimism vs. pessimism, rather than mood from past outcomes, causal attribution of skill or chance, different levels of personal agency or perceived control. Overall, these results further validate our account of how situational outlook impacts sequential consumer choice consistency via preference for self-continuity.

In Study 3 we showed that situational outlook affects preference for self-continuity in self-relevant choices, but not in non-self-relevant choices. We found similar results in a parallel version of Study 5. With the same population and under the same conditions, we gave participants a “Social Cognition Survey” instead of the “Self Identity Survey”, in which they listed and wrote about different people they had seen on that day (Part III, web appendix). In this parallel study, where the content of writing was no longer self-relevant, we found no effect of

manipulated situational outlook on the sequential consistency of writing. Thus, these results further corroborate self-relevance as a necessary condition for the effect.

STUDY 6: EXTENDING THE FORESIGHT EFFECT TO USUAL VS. NOVEL CONSUMER PRODUCTS

In the prior studies, we have measured sequential choice consistency by comparing a recently experienced choice to a subsequent choice. In Study 6, we investigate the generality of the effect by testing consumers' choices between a usually chosen option and a novel option, in absence of a specific prior choice. We designed a hypothetical scenario in which consumers choose a beverage, between the beverage that they typically drink (a usual option), and a beverage that they have never had (a novel option). Thus, the two options represent repeat purchase intention and novel product adoption, respectively.

We again use the cross-manipulation paradigm introduced in Study 5. Also, we examine the crucial role of future-oriented motivation underlying the effect once more by manipulating the presence of the future outcome as in Study 2.

The study had 2 (Recent Outcomes: Success vs. Failure) X 2 (Causal Beliefs: Skill vs. Chance) X 2 (Choice: With Future Uncertainty vs. No Future Uncertainty) between-subjects conditions. As long as the outcome is pending, we predicted that the local optimism would yield more choices of the usual option, whereas local pessimism would yield more choices of the novel option. By contrast, we predicted that the absence of future uncertainty would reduce the Foresight Effect.

Method

We recruited 203 participants ($M_{\text{age}} = 34.5$, 39% Male) in the same online survey pool as before, each for \$1. We asked participants to imagine that they were playing Blackjack in a Las Vegas casino, a game that plausibly contains aspects of both skill and chance (Wagenaar 1988). First, we showed participants a pamphlet introducing the rules of blackjack and featuring quotes from previous winners that emphasized the role of either skill or chance in the game (web appendix Part II), as a manipulation of causal beliefs. Then we manipulated the recent outcomes and the presence of a future outcome as below.

In conditions where the future outcome was pending, participants read:

“You have decided to buy five \$10 chips, each for one round. You decide that if you win, you’ll put the reward in your pocket, and if you lose, you’ll play another round with a new chip, but you won’t bet any chips you’ve won and put in your pocket. In each round, you’re the only player at the table. You plan to play only five rounds and redeem whatever you have in your pocket when you leave.”

Next, we manipulated recent outcomes by having participants either read about experiencing a winning streak or a losing streak of four rounds.

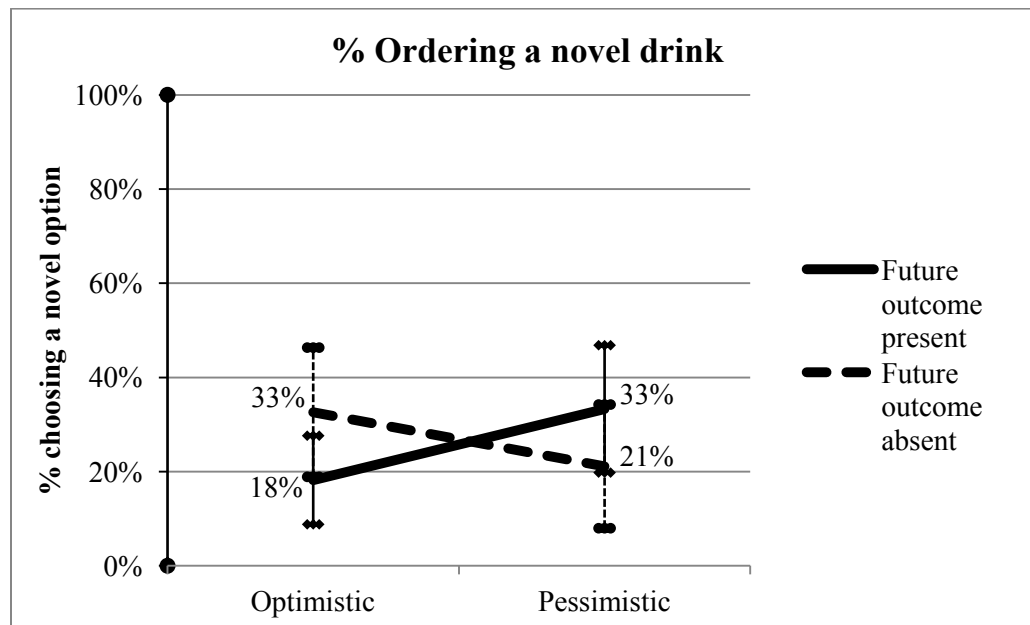
Then we asked participants, if they were to order a drink before the last round, what they would order between two counterbalanced options: *“The drink that you usually like and often order”* and *“An unusual drink that you have never tried before but have always wanted to”*.

Participants in the conditions with no future uncertainty read an almost identical scenario, except that they had initially bought four chips instead of five, and had therefore used all their chips already and were not anticipating future rounds when choosing between the drinks.

Results

First, when participants faced future uncertainty, we replicated the Foresight Effect for choices between a usual and a novel beverage. Coding the conditions as local optimism and local pessimism, as in Study 5, we found local pessimism gave rise to more choices of the novel drink, compared to local optimism (33.3% vs. 18.2%, $F(1,112) = 3.49$, $p = .064$, $\eta_p^2 = .030$; figure 8). This was further validated in an ANOVA, which found an interaction between recent outcomes and causal beliefs ($F(1,111) = 4.06$, $p < .05$).

FIGURE 8. SITUATIONAL OUTLOOK (RECODED FROM CAUSAL INFORMATION AND PRIOR PERFORMANCE) INFLUENCED CHOICE BETWEEN USUAL AND NOVEL PRODUCTS ONLY IN PRESENCE OF FUTURE UNCERTAINTY (STUDY 6).



Error bars depict 95% Confidence Interval.

By contrast, in the scenario with no future uncertainty, participants similarly preferred the usual drink (67.4% vs. 78.9%, $F(1, 82) = 1.39$, n.s.), and we did not find any interaction between causal beliefs and recent outcomes on choices ($F(1,80) = 1.38$, n.s). Overall, we found the predicted interaction between the recoded local optimism vs. local pessimism variable, and the manipulated presence of future uncertainty on choices ($F(1,194) = 4.46$, $p < .05$, $\eta_p^2 = .022$).

Likewise, we found a significant three-way interaction among recent outcomes, causal beliefs, and the presence of future uncertainty on choices ($F(1,191) = 4.85, p < .05$).

Discussion

Study 6 replicated the Foresight Effect in the broader context of choices between usual vs. novel consumer options. These results provide strong support for our framework, and suggest that the Foresight Effect has marketing implications for repeat-purchase and novel product adoption decisions.

Moreover, the cross-manipulation paradigm in Studies 5 and 6 addressed common confounds. The study design directly precluded potential confounds such as mood and causal attribution, by dissociating these factors from the valence of manipulated situational outlook. In addition, we measured perceived control and perceived agency in both studies, which typically correlate with both recent performance and causal attribution, and found that neither measure predicted the results, when controlling for manipulated situational outlook (web appendix). In addition, we found no effects of the other variables including self-monitoring, self-efficacy, and self-concept clarity in any studies.

GENERAL DISCUSSION

Consumers sometimes prefer to stay loyal, sticking to their usual choices, and sometimes prefer to try something new. This paper demonstrates that one important determinant of these variations of preferences is situational future outlook, that is, the local optimism or pessimism consumers experience about an imminent outcome, which can be completely unrelated to the

content of choices per se. A person's situational outlook affects her preference for self-continuity, which in turn leads to differences in the sequential consistency of the consumer choices she makes. We demonstrated this Foresight Effect and investigated the underlying mechanism in a series of six studies. Overall, incorporating all the data we have collected in conditions where the Foresight Effect was predicted, the effect of situational outlook on choice consistency was highly significant and had a moderate effect size (39.6% vs. 56.6%, $SD = .49$ vs. $.50$, $F(1,1211) = 33.5$, $p < .001$, $\eta^2 = .027$, details in the web appendix).

Interpreting the Foresight Effect

The Foresight Effect demonstrates that having a different situation outlook on the future results in different consumer choices. Likewise, recent research has found that specific superstitions and fateful beliefs about the future can affect current consumer choices (Converse, Risen and Carter 2012, Kim, Kulow and Kramer 2013, Hamerman and Johar 2013). However, the Foresight Effect is distinct from overt superstition or magical thinking (Vyse 1997, James, Handelman and Taylor 2011), as participants did not believe that the consistency of their choices could affect their task performance, and the results were not moderated by the tendency to use superstitious explanations.

Rather, the Foresight Effect can be interpreted as reflecting "quasi-magical thinking" (Shafir and Tversky 1992), typically due to a conflation of causal contingency and diagnostic contingency leading to a general associative response (Skinner 1948, Quattrone and Tversky 1984). Consistent with this interpretation, the Foresight Effect occurs for choices that represent actual self-continuity or self-change. In an additional study (reported in the web appendix), we replicate the Foresight Effect when participants were choosing a magazine article to read (as in

Study 1), but not when they were asked to express a hypothetical preference, contrary to an identity-signaling account.

We have also introduced an important distinction, between situational optimism about an imminent outcome and the aspects of optimism previously studied, particularly dispositional optimism (Scheier and Carver 1985) and long-term state optimism (Kluemper et al. 2009), and mood (Salovey et al., 2000), a common confound. In our pooled data, while situational optimism moderately correlates with long-term state optimism and with dispositional optimism ($r_s > .285$, $p_s < .001$), only situational optimism affects sequential choice consistency. Neither dispositional optimism nor long-term state optimism significantly affected choice consistency, when controlling for situational optimism ($F(1, 1022) = .14$, $F(1, 836) = .25$, n.s.). Likewise, mood strongly correlated with situational optimism ($r = .284$, $p < .001$), but had no effect on consumer choice consistency, after controlling for situational outlook ($F(1, 1210) = .99$, n.s.).

The cross-manipulation paradigm used in Studies 5 and 6 directly precluded additional potential confounds, including affective reactions to the prior outcomes and causal attribution, by dissociating these variables from the valence of situational outlook. Measures of perceived control and personal agency did not affect choice consistency, controlling for the situational outlook manipulation, as reported in the web appendix. Other variables we measured in these studies, including self-monitoring, self-efficacy, and self-concept clarity, did not have any effects.

Implications for Future Research

The notion that future-orientated thoughts often influence present behaviors traces back to the earliest days of empirical psychology (Mead 1934, Skinner 1938) and remains a central topic in contemporary psychology (Aspinwall 2006). However, presumably due to an initial

emphasis on individual differences and pervasive confounds in the prior research on optimism (Peterson 2000), researchers (George 1991, Peterson 2000, Kluemper et al. 2009) have critiqued that little is known about the psychological and behavioral implications of context-specific situational future outlook. Our findings provide initial evidence that local optimism and local pessimism have unique and important effects on decision making, focusing on preferences for self-continuity and choice consistency. Using the paradigms introduced in this paper, future research could investigate the potential effects of situational outlook on other self-relevant consequences, including, inter-temporal preferences, risk preferences, and self-control behaviors, which have been posited to be involve future-oriented decision processes.

The present research also advances the literature on dynamic decision-making, which has investigated factors that contribute to variety seeking in sequential decisions (Simonson 1990, Ratner et al 1999), and that identify which consumers will be the most receptive to novel product offers (Hirschman 1980). Our findings expand this research by identifying the effect of fleeting situational factors, independent of the evaluation of product characteristics, on the sequential consistency of seemingly unrelated consumer choices.

In a competitive market-place, early-entrant brands will benefit from consumer self-continuity and the resulting brand loyalty, while upstart brands need to convince consumers to change their behaviors and try a novel option. Thus, Pepsi-Cola emphasized being part of a new generation when taking on “always Coca-Cola” and Apple urged consumers to “think different” in its initial attempts to lure computer buyers away from IBM and Microsoft. Our findings suggest situational outlook – whether consumers are locally optimistic or pessimistic about imminent personal outcomes at the time of decision, can crucially determine whether they favor the consistency signaled by the usual brand or the change represented by a novel brand. Whether

consumers want to relive yesterday or want to create a new today depends on what they anticipate for tomorrow.

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Web Appendix

- I. Additional Results (Tables, figures and additional measures)
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- II. Study stimuli & samples
 - a. Self-relevance test for all stimuli
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I. Additional Results

TABLE 1. SCREENING CRITERIA AND PERCENTAGES.

	N before screening	N after screening	Failed attention check	Not native English	Suspicion
Study 1: Online Media <i>(Online, real choice)</i>	197	187	2 1.0%	8 4.1%	0 0.00%
Study 2: Movie Trailer I <i>(Online, real choice)</i>	431	420	4 0.9%	7 1.6%	0 0.00%
Study 3: Music <i>(Laboratory, real choice)</i>	204	190	9 4.4%	14 6.9%	0 0.00%
Study 4: Movie Trailer II <i>(Online, real choice)</i>	441	418	14 3.2%	9 2.0%	0 0.00%
Study 5: Self-description <i>(Laboratory, real choice)</i>	79	75	0 0.0%	0 0.0%	4 5.06%
Study 6: Beverage <i>(Online, hypothetical scenario)</i>	213	199	10 4.7%	4 2.0%	0 0.00%

*Percentages overlapped in Study 3.

TABLE 2. MANIPULATION CHECK: PARTICIPANTS REPORTED FEELING MORE OPTIMISTIC TOWARDS THE FUTURE OUTCOME IN OPTIMISM-INDUCING CONDITIONS.

	Anticipatory state	N	Mean	Std. Deviation	F	p-value
Study 1:	Optimistic	93	71.6	26.4	F (1, 185)=14.9	0.000
Online Media	Pessimistic	94	55.9	29.1		
Study 2:	Optimistic	208	73.8	24.0	F (1, 418)=38.9	0.000
Movie Trailer I	Pessimistic	212	58.1	27.4		
Study 3:	Optimistic	93	74.1	24.1	F (1, 183)=21.9	0.000
Music	Pessimistic	92	56.3	27.6		
Study 4:	Optimistic	210	75.2	23.3	F (1, 416)=42.3	0.000
Movie Trailer II	Pessimistic	208	59.4	26.3		

"How optimistic or pessimistic were you before you started the prize round of the Scrabble Game?" on a slider scale from "Very Pessimistic" (0) to "Very Optimistic" (100).

TABLE 3. CAUSAL BELIEF CHECK: PARTICIPANTS BELIEVED THE OUTCOME WAS PREDOMINANTLY SKILL-DETERMINED.

	N	Mean	Std. Deviation	t-test	p-value
Study 1: Online Media	187	72.8	21.3	t (186)=14.6	0.000
Study 2: Movie Trailer I	420	74.0	22.6	t (419)=21.8	0.000
Study 3: Music	185	74.1	23.4	t (184)=14.0	0.000
Study 4: Movie Trailer II	425	73.3	21.8	t (417)=21.9	0.000

"Do you think the Scrabble Game was determined more by chance or skill?" on a slider scale from chance (0) to skill (100).

TABLE 4. PARTICIPANTS REPORT NOT BELIEVING IN THE CAUSAL CONTINGENCY BETWEEN CHOICE CONSISTENCY AND GAME OUTCOMES.

	Question	Yes	Maybe	No	Total
Study 1: Online Media		14	14	159	187
<i>(Online, real choice)</i>		7.5%	7.5%	85.0%	100.0%
Study 2: Movie Trailer I		20	25	375	420
<i>(Online, real choice)</i>					
Study 3: Music	"Do you think the choice could affect your performance in the Scrabble/Ball-rolling Game?"	11	9	170	190
<i>(Laboratory, real choice)</i>		5.8%	4.7%	89.5%	100.0%
Study 4: Movie Trailer II		31	37	350	418
<i>(Online, real choice)</i>		7.4%	8.9%	83.7%	100.0%
Study 5: Self-description		4	0	71	75
<i>(Laboratory, real choice)</i>		5.1%	0.0%	94.9%	100.0%
Study 3: Music	"Do you think your performance in the Scrabble Game affected your choice?"	7	2	181	190
<i>(Laboratory, real choice)</i>		3.7%	1.1%	95.3%	100.0%

TABLE 5. SELF-RELEVANCE OF CONSUMER CHOICES FOR STUDY STIMULI.

	N	Mean	Std. Deviation	Cronbach's α	t-test	p-value
Magazine	53	2.71	0.45924	0.795	t (52) = 11.2	0.000
Movie	54	2.63	0.52249	0.802	t (53) = 8.79	0.000
Music	52	2.71	0.46806	0.789	t (51) = 11.0	0.000
Beverage	53	2.27	0.64273	0.841	t (52) = 3.05	0.004

Average of ratings for four statements: Disagree (1), Neutral (2), Agree (3); t-test results based on one-sample comparisons with the neutral point (2) (See Section II - A for items).

TABLE 6. SIMPLE EFFECTS IN SKILL-BELIEF AND CHANCE-BELIEF CONDITIONS OF PRIOR PERFORMANCE ON CHOICE CONSISTENCY, RESPECTIVELY (STUDY 5 & 6)

	Mean		F-test	p-value
Study 5	After successes	After failures		
Skill-belief	50.0%	75.0%	F (1, 40) = 1.80	0.19
Chance-belief	81.3%	45.0%	F (1, 36) = 3.05	0.09
Study 6	After successes	After failures		
Skill-belief	18.2%	34.8%	F (1, 54) = 1.99	0.16
Chance-belief	33.3%	18.2%	F (1, 55) = 1.71	0.20

TABLE 7. SELF-REPORTED PERCEIVED CONTROL AND AGENCY DO NOT HAVE SEPARATE EFFECTS ON CHOICE CONSISTENCY WHEN CONTROLLING FOR SITUATIONAL OUTLOOK (STUDY 5 & 6)

	F-test	p-value
Study 5		
Perceived Control	F (1, 72) = 2.65	0.11
Perceived Agency	F (1, 72) = .458	0.50
Study 6		
Perceived Control	F (1, 110) = 3.75	0.84
Perceived Agency	F (1, 111) = 3.39	0.92

TABLE 8. SHARE OF CHOICE (STUDY 1: ONLINE MEDIA)

Situational Outlook	Options	First Choice	Second Choice	Within-condition Difference
Optimistic	E! Online	30.1%	31.2%	F (1, 92) = .052, p = .82
	The Wall Street Journal	10.8%	8.6%	
	Scientific American	10.8%	15.1%	
	National Geographic	48.4%	45.2%	
Pessimistic	E! Online	23.4%	22.3%	F (1, 93) = .933, p = .34
	The Wall Street Journal	9.6%	7.4%	
	Scientific American	28.7%	22.3%	
	National Geographic	38.3%	47.9%	

TABLE 9. SHARE OF CHOICE (STUDY 1: MOVIE TRAILER I, BEFORE-PRIZE CONDITIONS)

Situational Outlook	Options	First Choice	Second Choice	Within-condition Difference
Optimistic	Action	36.5%	29.8%	F (1, 103) = 1.56, p = .21
	Romance	16.3%	17.3%	
	Drama	23.1%	27.9%	
	Animation	24.0%	25.0%	
Pessimistic	Action	43.3%	30.8%	F (1, 103) = 2.54, p = .11
	Romance	7.7%	13.5%	
	Drama	25.0%	25.0%	
	Animation	24.0%	30.8%	

TABLE 10. SHARE OF CHOICE (STUDY 4: MOVIE TRAILER II)

Situational Outlook	Options	First Choice	Second Choice	Within-condition Difference
Optimistic	Action	40.0%	39.0%	F (1, 209) = .003, p = .96
	Romance	12.9%	12.9%	
	Drama	24.3%	26.7%	
	Animation	22.9%	21.4%	
Pessimistic	Action	31.3%	26.9%	F (1, 207) = 1.47, p = .23
	Romance	18.3%	18.3%	
	Drama	25.5%	26.4%	
	Animation	25.0%	28.4%	

II. Study stimuli & samples

Self-relevance pre-tests:

In order to confirm the self-relevance of the stimuli, as suggested by the prior literature (Belk 1988), we administered a four-item scale to 53 online participants. They indicated whether they disagreed (1), felt neutral (2), or agreed (3) with each item, such as: “*Choosing which online magazines to read may reflect and contribute to how one thinks about, evaluates, and perceives themselves*”. Participants in the pretest generally agreed ($M = 2.71$, $SD = .46$, $t(52) = 11.2$, $p < .001$ compared with the neutral response of 2), reflecting their view that the specific consumer choice used in the study is relevant to their sense of self. Similar pre-tests were conducted for all the studies, with full details provided in the web appendix.

(Magazine version):

Please indicate the degree to which you agree with each of the following statements: (Disagree (1), Neutral (2), Agree (3))

1. Choosing which online magazines to read may reflect and contribute to how one thinks about, evaluates, and perceives themselves.
2. Reading different magazines may make people feel differently about themselves.
3. Among the following four online magazines: E!Online, The Wall Street Journal, Scientific America, and National Geographic, choosing which online magazines to read may reflect and contribute to how one thinks about, evaluates, and perceives themselves.
4. Reading different magazines among E!Online, The Wall Street Journal, Scientific America, and National Geographic may bring people different experiences.

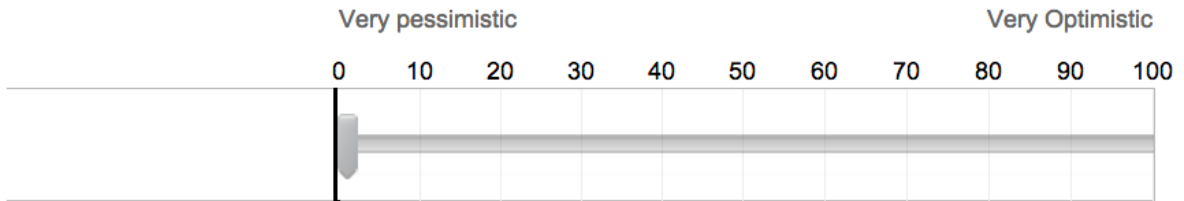
Pretests for movie, music and beverages were worded similarly.

Long-term state optimism measure

(Screenshot from Qualtrics)

Think about your future in a year from now. How optimistic or pessimistic are you about your near future?

Slide the bar below from "Very Pessimistic" (0) to "Very Optimistic" (100):



Study 1– Online Magazine Stimuli

Scrabble Game Instructions:

Welcome to our Scrabble Game. In this game, you'll have a chance to win a prize!

In the game, we'll give you seven random letters to form some commonly used words. You'll have one practice round where you may familiarize yourself with the rules and the level of difficulty of game, and one prize round where you can win an extra \$1 in addition to the base pay of the survey.

We'll give you seven random letters on the next page. Please use the given letters to form the requested number of words in 90 seconds. Follow the rules below:

1. The word has to be more than three letters long.
2. The word has to be a common word used as part of speech; must not be an abbreviation, proper noun, or hyphenated.

Now you may prepare a pen and a piece of scratch paper by your side. Once you proceed to the next page, you'll have 90 seconds to complete the round. While you are on the page, you may not leave the page, pause, or go on other webpages. When time is up, you'll be automatically directed to the next page within 10 seconds. So make sure you submit your answers within 10 seconds after the 90 second time limit is up.

Please move on to the next page and start the practice round when you are ready.

Easy version:

The letters are:

P B F A H C E

List 4 or more words in the given time to win this round!

Notes:

1. The word must be more than three letters long.
2. The word must be a common word used as part of speech; must not be an abbreviation, proper noun, or hyphenated.
3. Make sure you click the submit ">>" button below within 10 seconds after the 90 second time limit is up.

Word 1	<input type="text"/>
Word 2	<input type="text"/>
Word 3	<input type="text"/>
Word 4	<input type="text"/>
Other words	<input type="text"/>

Difficult version:

The letters are:

P B F A H C E

List 10 or more words in the given time to win this round!

Notes:

1. The word must be more than three letters long.
2. The word must be a common word used as part of speech; must not be an abbreviation, proper noun, or hyphenated.
3. Make sure you click the submit ">>" button below within 10 seconds after the 90 second time limit is up.

Word 1	<input type="text"/>
Word 2	<input type="text"/>
Word 3	<input type="text"/>
Word 4	<input type="text"/>
Word 5	<input type="text"/>
Word 6	<input type="text"/>
Word 7	<input type="text"/>
Word 8	<input type="text"/>
Word 9	<input type="text"/>
Word 10	<input type="text"/>
Other words	<input type="text"/>

Online Media Consumer Survey Instructions:

First choice:

Online Media Consumer Survey

In this survey, we're interested in your choice for different online information sources. We'll show you four different online newspapers and magazines. You may choose one. **This choice should reflect what you'd like to read the most at the moment.**

After you make the choice, we'll ask you to read **one short excerpt** from the online newspaper or magazine you chose, and ask you what you think of the excerpt.

Second choice:

Online Media Consumer Survey Part II

Now we'll ask you again about your choices for different online information sources. We'll present you the same set of four online newspapers and magazines as before. **You may choose to read a new excerpt from the same source, or a different source.** This choice should reflect **what you'd like to read the most at the moment.**

After you make the choice, we'll ask you to read **another short excerpt** from the newspapers or magazine you chose, and ask you what you think about the excerpt.

Note that if you choose the same option that you've chosen earlier, then you'll read a new excerpt from the same source, which will be **similar to** but not identical to the first one you read.

If you choose one of the other three options this time, then the new excerpt will be from a different source, which will be **very different** from the first one you read.

Magazine Article Sample 1:



Chris Martin Reveals a Certain Pop Star Inspired Coldplay's "A Sky Full of Stars"—Can You Guess Who?!



Artists draw inspiration from a variety of things, and sometimes, it's other artists.

Appearing in a new Beat x Beat webcast produced by Beats by Dre, Coldplay frontman Chris Martin explained the creative process when it came to writing the band's hit song "A Sky Full of Stars," and revealed that there was one popular pop queen whose music really helped spark the idea behind the chart-topping Coldplay track.

And you may be surprised at who it is.

"I'll tell you the truth: I was listening to a lot of Katy Perry," Martin said.

Yep, that California Gurl is partially to thank for that song you can never get out of your head.

Martin continued, "A lot of her songs have the same chord sequence the whole time. Your body feels comfortable with them and then the melody's changing on top so there's a groove you really get in to and then also you're kept interested... so I was like, 'that's an amazing way of doing songs.'"

Although Katy Perry helped set the wheels in motion, the crooner also shared that electronic dance music played a fair share in completing the track, too.

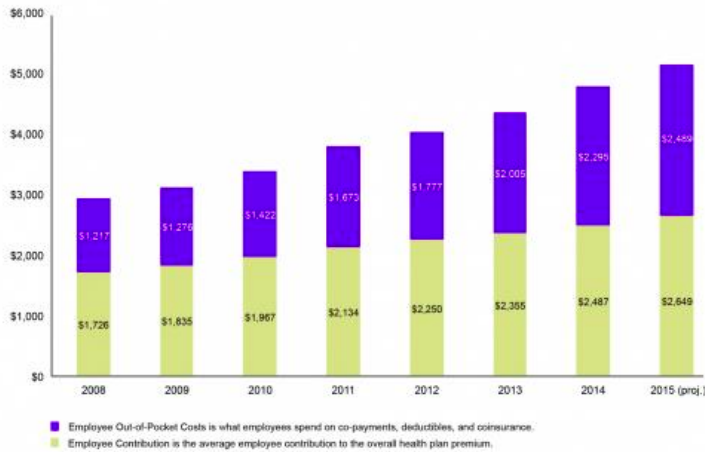
.....

Magazine Article Sample 2:



Worker Out-Of-Pocket Health Costs Have Doubled In Five Years

National Average Employee Contributions and Out-of-Pocket Costs



As the economy improves and employees spend more on health care, employer-paid premiums are rising again with an increase of 5.5 percent forecast for 2015 with worker premiums and out-of-pocket costs – which have doubled since 2009 – rising at an even faster clip.

The annual health care cost analysis by Aon Hewitt (AON), the large employee benefits consultancy shows annual employer health care costs rising to \$11,304 next year from \$10,717. It's the highest percentage rate increase since 2011, when employer costs rose 8.5 percent, Aon Hewitt said.

The latest increase in employer health care premiums, which almost always translates into more costs piled onto workers, comes as unemployment falls and workers feel more secure in keeping their jobs. That means they spend more money on health care and "discretionary items" that they didn't buy when economic times were less stable, Aon Hewitt said.

"With employment rates stabilizing, individuals are feeling more secure about their financial situation and have been willing to re-engage in using the health care system," said Tim Nimmer, chief health care actuary at Aon Hewitt, said in a statement accompanying the report. "As these utilization rates increase, we expect to see health care costs increases follow."

.....

Study 2&4 – Movie trailer:

Movie trailers were found on YouTube. Trailers used in Study 2 were for movies to be released after November 2014, which was the time of the study. In December 2014, at the time of Study 4, trailers for movies that had already been released were replaced trailers for newer movies. The movie trailers used in Study 2 and Study 4 were:

Action: Avengers: Age of Ultron, Black Sea

Romance: Theory of everything (replaced with The Age of Adaline in Study 4), Old Fashioned

Drama: Big Eyes (replaced with McFarland, USA in Study 4), Unbroken (replaced with The Second Best Exotic Marigold Hotel in Study 4)

Animation: The Penguins of Madagascar (replaced with Peanuts in Study 4), Minions.

Preference for self-continuity scale (Used in Study 4):

Please indicate how much you agree with the following statements:

(from “Strongly Disagree” (1) to “Strongly Agree” (5))

(Cronbach’s alpha = .86)

1. Now feels like a good time for some changes to happen
2. I feel like staying the same right now
3. I would like to continue to experience what I feel now
4. I would like to experience something different now
5. A novel experience would be nice now
6. I would rather stay the course than to try something new now

Items 1, 4, and 5 were reverse coded. A larger number of the total score indicates stronger preference for self-continuity.

Study 3 – Music & perceived difference posttest

Music Attitude Survey:

Each participant answered these questions in the survey for the first choices:

A person often likes a variety of musicians. Different music genres can represent different aspects of a person's identity. For example, one may feel like listening to Lady Gaga sometimes, while enjoy Louis Armstrong some other times.

List the name of three different musicians that you listen to frequently, each of whom represents a different aspect of your identity:

Musicians:

1.
2.
3.

Now think of a family member who has very different music preferences than you. Who are you thinking of? Write down the person's relationship to you:

You picked "\${q://QID55/ChoiceTextEntryValue}". Now, please list three different musicians that he/she listens to most frequently, each of whom represent different aspect of his/her identity.

(Note: Since you and your \${q://QID55/ChoiceTextEntryValue} have different music preferences, please don't list any of the musicians from your list even if sometimes you may both listen to them):

1.
2.
3.

Participants read the following page for the second choice:

Now please think again about the musicians you listed earlier.

We will provide you access to the music library again. This time, among \${q://QID14/ChoiceTextEntryValue/1}, \${q://QID14/ChoiceTextEntryValue/2}, and \${q://QID14/ChoiceTextEntryValue/3}, which musician would you like to listen to? Would you like to listen once more to the same piece ("\${q://QID96/ChoiceTextEntryValue}") you just listened to, or listen to music of another musician you listed earlier?

- I would listen to the same musician's same piece of music
- I would listen to a different musician's music (write down the name of the musician below):

Posttest 1:

We conducted an initial test (N = 45), in which participants completed the first few questions in the “Music Attitude Consumer Survey,” as in the main study, including listing three of their own favorite musicians and three musicians for the family member. First, they rated the perceived difference among the musicians, for the two lists respectively, on 7-point scales from “not different at all” (1) to “extremely different” (7). We then asked them “How much of a change does a switch from one of the musicians to another feel to you?” for the two lists respectively, on 7-point scales from “not much change at all” (1) to “a very big change” (7).

Participants indicated that there was an equal degree of difference among one’s own favorite musicians and among the other person’s favorite musicians (M = 4.98 vs. 4.51, SD = 1.41 vs. 1.73, t (44) = 1.59, n.s.), inconsistent with the alternative explanation. Instead, supporting the proposed account, participants indicated that switching among one’s own favorite musicians felt more like a change to the self (M = 5.02, SD = 1.32), than did switching among a family member’s favorite musicians (M = 4.00, SD = 2.00, t (44) = 3.23, p < .005).

Posttest 2:

The second posttest (N = 56) used a procedure similar to the first posttest. Participants first generated two lists of musicians as in the “Music Attitude Consumer Survey”. Then they answered the following eight questions in total, on two 10-point scales, with the listed musicians and family member displayed:

“Suppose you are listening to one of your favorite musicians among AA, BB, CC, indicate the perceived degree of change of the following behavior for you:

Suppose you are listening to one of the list of favorite musicians XX, YY, ZZ of FAMILY MEMBER, indicate the perceived degree of change of the following behavior for you:

Suppose FM is listening to his or her list of favorite musicians XX, YY, ZZ, Indicate the perceived degree of change of the following behavior for FM:

Suppose FM is listening to your list of favorite musicians AA, BB, CC, Indicate the perceived degree of change of the following behavior for FM:



Suppose you are listening to one of your favorite musicians among AA, BB, CC, indicate the perceived degree of consistency of the following behavior for you:

Suppose you are listening to one of the favorite musicians XX, YY, ZZ of FM, indicate the perceived degree of consistency of the following behavior for you:

Suppose FM is listening to his or her list of favorite musicians XX, YY, ZZ, indicate the perceived degree of consistency of the following behavior for FM:

Suppose FM is listening to your list of favorite musicians AA, BB, CC, indicate the perceived degree of consistency of the following behavior for FM:

Low Consistency					High Consistency				
1	2	3	4	5	6	7	8	9	10
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

In addition, participants rated the perceived difference among the musicians on each list - “How much variety is among this list of musicians?”, on 1-7 scales (1= Just a little, 7 = very much).

Study 5 – Ball rolling, outlook pretest & content coding

Wording of the Skill vs. Chance manipulation:

Skill:

*To help you through the rest of the game, we would like to provide you with more information. In this game, skill plays a vitally important role. Each time you roll the ball, your strength and choice of direction may determine the result. Having a clear goal in mind before rolling may also help with the result. What you need to do is to plan carefully where you want the ball to land. **Your outcome in this game will depend on both your skill and your precision.***

Chance:

*To help you through the rest of the game, we would like to provide you with more information. In this game, luck plays a vitally important role. Each time you roll the ball, any of the erasers could divert it, or stop it. The ball's path may also affect the next go, changing the game at random. What you can do is to take your chance and make the best of it. **The outcome will depend on both random situational factors and your luck.***

Study 6 - beverages


Phamplets for the Skill vs. Chance manipulation:

Skill:


Blackjack Rules

- The cards from 2 through 9 are valued at their face value;
- The 10, Jack, Queen, and King are all valued at 10; an Ace can count as either 1 or 11, depending on which is more favorable;
- Every player draws cards for an initial two card hand, and after seeing those cards decides whether to draw more;
- The player bringing the total hand value closest to 21 without exceeding it wins.
- **Note: Of course a certain degree of luck plays a role in this game, but all it takes is just a little skill!**


The Top 3 Blackjack Winners in 2010



"This is amazing! I had what it took to win!!!"



"I can't believe I made it happen!"



"Following your strategy is everything.
Play well, everyone!"

Chance:

Blackjack Rules

- The cards from 2 through 9 are valued at their face value;
- The 10, Jack, Queen, and King are all valued at 10; an Ace can count as either 1 or 11, depending on which is more favorable;
- Every player draws cards for an initial two card hand, and after seeing those cards decides whether to draw more;
- The player bringing the total hand value closest to 21 without exceeding it wins.
- **Note: Of course a certain degree of skill plays a role in this game, but all it takes is just a little luck!**

The Top 3 Blackjack Winners in 2010



"This is amazing! I had luck on my side to win!!!"



"I can't believe it happened to me!"



**"Following your hunch is everything.
Good luck, everyone!"**

III. Additional studies

Ball-rolling Study Version 2: Writing about other people

The procedure in Version 2 (N=78) was identical to Study 5, except that participants received a questionnaire named “Social Cognition Survey” in the initial survey, in which they first read:

“People see numerous strangers in passing every day. For example, a doorman, a busy cashier, a passenger on the bus or train, and so on. Please think about the strangers that you have seen for a moment today, and list at least three different persons you have noticed.”

After they listed three different people, they chose one and briefly described that person.

On the second questionnaire, which participants received in the mid-game break, they chose between describing that same person or describing one of the other two people in detail.

There was no effect of future outlook on the choice between writing about the same other person or a different other person (47% vs. 44% choosing to write about a different person, $F(1,76) = .062$, $p = .804$), consistent with the findings of Study 3, regarding the role of self-relevance as a necessary condition for the Foresight Effect.

Ball-rolling Study Version 3: Choosing among different colors

In Version 3, rather than choosing between describing the same or a different aspect of the self, participants chose whether to keep or switch the rubber-band ball used in the game. As in Study 5 and Version 2, this is a symbolic choice, because the balls only differed in their colors, but otherwise had the same irregular shape, such that using one or another would not make a difference for performance in the game. According to our account, self-relevance plays a unique role in inferences from past to future, and therefore a symbolic choice involving change which does not involve the self will not be affected by differently anticipated future outcomes.

In this study, there was no separate survey. Instead, at the start of the game, participants (N=78) were shown three otherwise identical rubber-band balls in the colors of yellow, blue, and orange, respectively, and were randomly assigned to use one in the game. During the mid-game break, they were given a choice to either keep using the same ball, or replace it with one of the other two. The rest of the procedure was identical to Study 5.

There was again no effect of future outlook on the choice between keeping the same ball and changing the ball (63% vs. 58% choosing a novel color, $F(1,76) = .18$, $p = .677$), suggesting that situational optimism and pessimism did not affect choices.

After merging the data from Studies 5 and Version 2 and 3, we found a two-way interaction between outlook and self-relevance of the choice options ($F(1, 228) = 6.49, p = .012$).

Exploratory study: experiential vs. merely expressive choices

Consumer choices typically lead to consumption of consumer products or services. Thus, preferences for consistent choices typically result in continuity of experience, while preferences for changes result in novel experiences. However, consumer choices themselves can sometimes serve as mere signals to express one's sense of self (Schlenker et al. 1996, Ariely and Levav 2000, Kim and Drolet 2003). Thus, a consumer choice could be made due to a desire to experience the consumption, or a desire to express a preference, or both.

The results reported in the paper provide evidence that the Foresight Effect is due to differences in the preference for self-continuity. According to our framework, the situational outlook does not merely affect desires to provide a signal (either to others or to oneself) about self-continuity or self-change. Instead, the preference for change is rooted in an association between the self and future outcomes. Therefore, the preference for self-continuity or change should be stronger for actual self-relevant experiences, than for signaling preference. In this additional study, we distinguish between experience-based preferences and mere signaling preferences.

Method

This study employed a 2 (Situational Outlook: Optimistic vs. Pessimistic) x 2 (Choice: Experiential vs. Expressive) between-subjects design. In the Experiential condition, participants experienced their choice (reading a magazine article), while in the Expressive condition participants only expressed a preference but knew that they would not experience the choice (not read the article). If the Foresight Effect is primarily driven by preferences for experienced self-continuity, then we would expect to replicate the effect only in the Experiential conditions. However, if the effect reflects a motive to merely signal the preference for self-continuity, then we would replicate the effect in both Experiential and Expressive conditions.

Participants ($N = 263, M_{age} = 34.4, 53\%$ Male) were recruited from the same online subject pool as in Study 1 and were paid \$2.00. We again used the Scrabble game to manipulate situational outlook. Participants had 120 seconds to complete the game, but otherwise the procedure in the Experiential Choice conditions was identical to Study 1. In the Expressive Choice conditions, the procedure was the same except that participants were told they would not read the magazine articles they selected.

Results

We replicated the Foresight Effect in the Experiential Choice conditions, but not in the Expressive Choice conditions. In the Experiential Choice conditions, participants in the

Optimistic condition were marginally more likely to choose a second article from the same magazine that they had previously read, compared to participants in the Pessimistic condition (55.2% vs. 40.0%, $F(1,125) = 2.96$, $p = .088$, $\eta_p^2 = .023$). Participants in the Pessimistic condition tended to choose an article to then read from a novel magazine option (60.0%).

In contrast, in the Expressive Choice conditions, participants were equally like to express a preference for another article from the same magazine they had read previously in the Optimistic and Pessimistic conditions (64.6% vs. 73.1%, $F(1,130) = 1.11$, n.s.). ANOVA revealed a significant interaction between situational outlook and choice type ($F(1,255) = 3.94$, $p < .05$, $\eta_p^2 = .015$).

The choices in the Experiential and Expressive conditions conveyed similar signals of self, while only choices in the Experiential conditions resulted in the experience of self-continuity or self-change. The fact that we replicated the effect only in the Experiential Choice conditions suggests that the Foresight Effect is not attributable to a mere signaling motive. Instead, the effect of situational outlook on sequential consumer choice consistency is primarily due to preferences for actually experiencing self-continuity vs. self-change.

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