Coping with sequential conflicting emotional experiences

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A B S T R A C T

What influences retrospective evaluations of sequentially arising conflicting emotions? The present research brings to light two competing views, one where the positive emotion enables successful coping with the negative emotion and the other where the most salient aspect of the experience guides evaluations. Results from study 1 support the coping view. Specifically, relatively close (vs. distant) temporal proximity between movie clips arousing positive emotions and those eliciting negative emotions produced more favorable evaluations of the overall viewing experience. Study 2 examines the underlying process of coping through relatively close (vs. distant) temporal proximity between positive and negative emotions. Findings from this study support the notion that reappraisal drives the beneficial effect of relatively close (vs. distant) temporal proximity, which in turn leads to more favorable evaluations of conflicting emotional experiences.

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1. Introduction

Emotional experiences comprised of sequentially arising positive and negative emotions are a part of consumer life. A visit to Disneyland, deemed the "happiest place on earth," more often produces a roller coaster of emotions instead of pure happiness (Sutton, 1992), for example, from the exuberance felt when meeting a favorite Disney character on Main Street to the frustration felt while waiting in long lines. Conflicting emotions also arise for the 'happiest milestones' in life such as when planning weddings (Nelson & Otnes, 2005) and likewise for the types of decisions about engaging in vice behaviors such as drug and alcohol consumption (Fitzsimons, Nunes, & Williams, 2007) or gambling (Cowley, 2008). Positive and negative emotions present themselves for mundane experiences as well, for instance, while watching or listening to commercials (Edell & Burke, 1987; Ursavas & Hesapci-Sanaktekin, 2013). Indeed, consumption experiences are filled with ups and downs.

How do consumers evaluate such conflicting emotional experiences? What are the factors driving their evaluations? These are particularly important questions for marketers who are increasingly seeking to manage and structure consumption experiences for long-term customer relationship management (e.g. Grewal, Levy, & Kumar, 2009). From horror movies to extreme sports such as sky diving (Andrade & Cohen, 2007; Celsi, Rose, & Leigh, 1993), engineering conflicting emotions is at the crux of successful customer experience design (Brakus, Schmitt, & Zarantonello, 2009). Yet, despite their ubiquity, conflicting

emotional experiences have received far less attention from researchers than single-valence experiences, with existing work mostly identifying how and when conflicting emotions may be triggered (Brooks, Highhouse, Russell, & Mohr, 2003; Ursavas & Hesapci-Sanaktekin, 2013). Earlier work also demonstrated that conflicting as opposed to single-valenced emotional experiences activate both positive and negative emotion systems in memory (Cacioppo, Gardner, & Berntson, 1997; Davidson, 1993; Larsen, McGraw, & Cacioppo, 2001), positively correlate with higher activity levels in two different locations of the brain (Larsen, Norris, & Cacioppo, 2003), and can produce higher levels of felt discomfort that subsequently influences judgment (Williams & Aaker, 2002; Newby-Clark, McGregor, & Zanna, 2002; Priester & Petty, 1996). Although there has been debate over whether positive and negative emotions can truly be aroused simultaneously (Barrett & Bliss-Moreau, 2009), there has been unequivocal agreement that the underpinnings of conflicting emotional experiences can be sequential in nature (Russell & Carroll, 1999).

The present research brings to light two different views about consumer evaluations of sequentially arising positive and negative emotions. Drawing on research suggesting that positive emotions help renew the coping resources drained from negative emotions (Linville & Fischer, 1991), a coping view indicates that relatively close (vs. distant) temporal proximity between conflicting emotions should lead to more favorable evaluations (Labroo & Ramanathan, 2007), regardless of sequential ordering of the emotions (i.e. positive-negative or negative-positive; Linville & Fischer, 1991). However, other research on sequential positioning promotes that the most memorable aspect of the experience guides evaluation of sequences (Biswas, Grewal, & Roggeveen, 2010; Biswas, Labrecque, Lehmann, & Markos, 2014).

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Since memory fades over time, it is often the case that the most recent event would be the most salient. In this way, sequential ordering would matter as would temporal proximity.

We construct contrasting hypotheses to test these two views in Study 1 where participants watch and evaluate conflicting emotion inducing movie clips sequentially. Our findings align with the coping over the memory based sequential positioning view. Study 2 examines the possibility that the underlying process leading to successful coping in relatively close (vs. distant) temporal proximity of conflicting emotions is reappraisal (Richards & Gross, 2000) or "reinterpreting the situation in a manner that alters its meaning" (Manera, Samson, Pehrs, Lee, & Gross, 2014, p. 833). Specifically, this study finds that relatively close (vs. distant) temporal proximity impacts evaluations of a conflicting emotional experience in a jellybean sampling context, for those participants chronically high in reappraisal tendencies. An alternate suppression coping strategy is ruled out as well (Gross & John, 2003).

We contribute to existing research by highlighting and empirically examining two distinct theoretical views about evaluations of sequential conflicting emotional experiences, based on coping and sequential positioning literatures. Our findings align with the coping view. Moreover, we add to previous literature that has described temporal proximity as a key factor in coping with sequential conflicting emotions (e.g. Labroo & Ramanathan, 2007; Linville & Fischer, 1991). In particular, we shed light on reappraisal as a plausible strategy underlying the favorable effect of relatively close (vs. distant) temporal proximity on consumer evaluations and establish individual reappraisal tendencies as a novel moderator. For marketing managers, our findings imply the importance of exercising greater control over enabling conditions that allow consumers to reappraise sequentially arising conflicting emotions that commonly occur in a wide variety of consumer situations.

2. Theoretical background

2.1. Coping with conflicting emotions

One stream of research indicates that when consumers experience conflicting emotions, feelings of discomfort arise (Priester & Petty, 1996), which they often attempt to resolve either by avoiding the uncomfortable experience completely or by finding ways to minimize the discomfort once it arises (Ramanathan & Williams, 2007). Researchers have identified moderators of the relationships among conflicting emotional experiences, felt discomfort, and subsequent judgments, with the bulk of this work investigating the role of individual difference variables (propensity to accept duality: Williams & Aaker, 2002; duality expertise: Kramer, Lau-Gesk, & Chiu, 2009; construal level: Hong & Lee, 2010). Moreover, evidence suggests that evaluations of conflicting emotional experiences are relatively more favorable for consumers who have the necessary skills to cope with or overcome the discomfort otherwise associated with the experience (Kramer et al., 2009; Williams & Aaker, 2002). For example, those more prone to accepting duality due to their own experiences with conflict accumulated over a lifetime appear better equipped to cope with and thereby respond more favorably to conflicting emotions than those with far fewer experiences with facing conflict. The elderly (vs. young), East Asians (vs. westerners), and biculturals (vs. monoculturals) represent such individuals likely associated with higher duality acceptance and lower feelings of discomfort with conflicting emotions (Kramer et al., 2009; Williams & Aaker, 2002). Thus, consumer responses to conflicting emotions appear to depend on availability of a coping mechanism.

Importantly, considerably less work examining the relationship between conflicting emotions and coping has focused on sequentially arising positive and negative emotions (e.g. Williams & Aaker, 2002). Further, the existing literature on sequential conflicting emotions has concentrated on certain characteristics of the experiential pattern created by the emotional sequencing rather than on individual differences as

moderating variables. Specifically, this line of work suggests that relatively close (vs. distant) temporal proximity of positive and negative events facilitates mental integration (segregation) of positive and negative affect into an overall evaluation (Thaler & Johnson, 1990). For example, Cowley (2008) found that winning gamblers integrate big losses that occur in close proximity to big wins into an overall favorable evaluation of a gambling session. Integration of positive and negative affect leads to a cancellation effect that minimizes the pain and decline of happiness associated with a negative event (Thaler & Johnson, 1990).

Interestingly, these findings are consistent with research indicating that positive emotion can build resources (Fredrickson, Cohn, Coffey, Pek, & Finke, 2008) that function as reserves (Fredrickson & Losada, 2005) and can be drawn upon to cope with negative emotion. Labroo and Ramanathan (2007) argued and showed that, in addition to ads arousing an improving sequence of conflicting emotions, those that induce a downward trend of positive to negative emotion can yield favorable responses. Importantly, results for this declining pattern of emotions attenuated as time delay between the conflicting emotions increased, thereby substantiating the notion that temporal proximity influences the coping effectiveness of positive emotion helping to counteract the depletion caused from negative emotion. Linville and Fischer (1991) made similar claims, proposing that positive events can create additional coping resources that can buffer against the loss of resources drained by a negative event when they are temporally contiguous irrespective of the sequential ordering of the positive and negative events. Support for their theorizing was unveiled through the intertemporal choices people made. For conflicting outcome imaginary scenarios (e.g., earning a bad grade in one class but a good grade in another), participants generally chose experiencing both events on the same day rather than on different days regardless of whether the positive or negative event occurred first. Conversely, when positive and negative events are not contiguous, it creates a break in the sequence as earlier emotions dissipate, which presumably reduces the coping effectiveness of positive emotion to buffer resources drained by negative emotion (Labroo & Ramanathan, 2007; Linville & Fischer, 1991). Further, Lau-Gesk (2005) found that perception of emotional source similarity moderates this temporal proximity effect. Specifically, results from a jellybean tasting revealed that the lower (vs. higher) the perceived similarity among jellybeans, the more favorable evaluations of the overall experience for jellybeans producing positive and negative emotional responses when sampled closer (vs. distant) in temporal proximity. In these instances, whether the samples were tasted in a sequence reflecting improvement or decline did not influence outcomes (Linville & Fischer, 1991).

In sum, there is growing evidence for the influential role of temporal proximity for conflicting emotional experiences due to the nourishment generated from positive emotions to help counteract the depletion of coping resources from negative emotions. Nevertheless, the specific coping processes that may result in more favorable evaluations of conflicting emotional experiences have not yet been pinpointed. Before addressing this gap in the literature, we turn next to another stream of work that offers a different view on evaluations of sequential conflicting emotions, one that offers a purely memory based account to understand preferences for conflicting emotional sequences.

2.2. Remembering conflicting emotions: recency

A related stream of research has investigated serial positioning effects for non-experiential and experiential stimuli (Biswas et al., 2010; Biswas et al., 2014; Zauberman, Diehl, & Ariely, 2006). Earlier work in this area mostly focused on sequences of repeated single valence inputs, in particular, those considered non-experiential stimuli (Büyükkurt, 1986). As a result, issues regarding coping have received little if any attention here. Rather since the interest lies in the relative influential weight of certain serial positioning, the sequential stimuli used have

been generally the same valence whereby consumers' subsequent choices are observed and interpreted as reflecting the relative impact of specific serial positioning. For non-experiential sequences, primacy, the stimulus experienced first in a sequence, appears more influential in subsequent judgment and recall (Biswas, Biswas, & Chatterjee, 2009; Carlson, Meloy, & Russo, 2006). However, more recent research on experiential sensory-based sequences reveals the dominance of recency, the stimulus experienced last (O'Brien & Ellsworth, 2012). For example, in one study, Biswas et al. (2010) studied people's rankings between two equally desirable beverages they just sampled as well as between two equally undesirable beverages. Regardless of desirability of beverage sampled, findings revealed enhanced recall for the second beverage, thereby prompting preference for the second desirable beverage and for the first undesirable beverage respectively. However, with enhanced recall of both first and second beverage samplings, the recency effect attenuated.

More directly pertinent to the present research, Biswas et al. (2010) tested their theorizing further by examining people's preferences for music samplings of opposing-valence, that is, where they listened to two equally desirable music clips and one undesirable, in three different sequential orderings (see study 3). When consumers experience the undesirable product last (Desirable 1-Desirable 2-Undesirable) or first (Undesirable-Desirable 1-Desirable 2), recency emerged whereby the sampling of the second desirable music clip was preferred. In contrast, preference for the first desirable sample occurred for the experiential pattern where the undesirable music clip was sampled between the two desirable clips (Desirable 1-Undesirable-Desirable 2) presumably because consumers remembered the second desirable sample relatively less favorably due to assimilation effects. This in turn prompted preference for the altered more desirable first sample. In study 4 where the sequential ordering of Desirable 1-Undesirable-Desirable 2 was investigated, without time delay between samplings, results revealed a greater preference for the first desirable product but with time delay, there tends to be a greater preference for the second desirable product as a result of recency effects.

In the present research, relatively close (vs. distant) temporal proximity between conflicting emotions should be conceptually equivalent to sampling experiential cues of opposing valence without a time delay (with time delay). Thus, a memory based sequential positioning view as discussed above, suggests that when sequential conflicting emotions arise in an improving sequence (negative-positive emotion or undesirable-desirable), evaluations are more favorable in relatively distant (vs. close) temporal proximity due to recency (assimilation) effects.

H1a. When conflicting emotions arise in an improving sequence, overall evaluations will be more (vs. less) favorable when consumers experience conflicting emotions in relatively distant (vs. close) temporal proximity.

However, an alternate view based on coping suggests that relatively close (vs. distant) temporal proximity between conflicting emotions should lead to more favorable evaluations due to successful coping, notwithstanding the sequential ordering between the conflicting emotions.

H1b. Irrespective of the sequential ordering of conflicting emotions, overall evaluations will be more (vs. less) favorable when consumers experience conflicting emotions in relatively close (vs. distant) temporal proximity.

In the next section, we describe our first study where we empirically test these contrasting hypotheses. In particular, we use an improving sequence of conflicting emotions only (negative- positive emotion), because the key objective of this study is to examine memory based sequential positioning versus coping accounts.

3. Study 1: method

Thirty-five undergraduate students (M_{age} = 20.5; 54.3% male) participated in the study in exchange for course credit and were randomly assigned to relatively close versus distant temporal proximity between-subjects design. In particular, based on past literature (Rottenberg, Ray, & Gross, 2007), all participants saw two movie clips to induce negative (scene from *The Champ*) and positive (scene from *When Harry Met Sally*) emotion. All participants were instructed to watch and listen to the clips carefully.

All participants watched the movie clips in an improving sequence (Negative-Positive). Relatively distant (close) temporal proximity was operationalized through a time delay (without a time delay) (e.g. Labroo & Ramanathan, 2007). In the relatively close temporal proximity condition, participants clicked *Next* to watch the second clip as soon as they had finished watching the first clip. In the relatively distant temporal proximity condition, participants completed an unrelated independent-interdependent self-construal scale (Singelis, 1994) in between the two movie clips. Example scale items included "My personal identity, independent of others, is very important to me" and "Being able to take care of myself is a primary concern for me".

After watching both clips, participants were asked to provide their overall evaluations of the experience of watching the movie clips using a seven-point scale ("Please provide an overall rating of your experience of watching the two film clips": good, favorable, positive, where 1 = not at all, 7 = very, α = 0.83). This index constituted our main dependent variable. To ascertain that our negative and positive clips were perceived as such, participants evaluated each clip on a two-item positive-negative affect scale (e.g. Fredrickson & Kahneman, 1993) ("Please rate your feelings while you watched the first/second movie clip": anchors: 1 = unpleasant, negative, 7 = pleasant, positive; r = 0.63 and 0.89 for the negative and positive clip respectively; p < 0.001). Next, as a manipulation check for the temporal proximity measure, they marked their agreement (anchors: 1 = strongly disagree, 7 = strongly agree) that the second film clip was shown immediately after the first film clip, or that there was a time delay between the first and second film clip (reverse scored), which we used to create a temporal proximity measure (r = 0.61, p < 0.001). Participants were also asked open-ended questions to estimate the amount of time between the two clips. In addition, since familiarity with the movie clips can impact overall evaluations, we asked participants whether they have watched the movie clips before the current study was conducted ("Have you watched the first/second movie clips before?", where 1 = Yes and 2 = No). While none of the participants reported that they had watched the first movie clip before (*The Champ*), some participants indicated that they had previously watched the second movie clip (*When Harry Met Sally*). Thus, the latter variable, that is whether they have watched the second movie clip before, was included as a covariate to control for familiarity with the movie clip. Finally, participants indicated their gender and age, and were thanked and debriefed.

3.1. Results

3.1.1. Manipulation checks

A one-way ANOVA on the temporal proximity manipulation check yielded the expected effect of temporal proximity; $F(1, 33)$ = 21.34, p < 0.001, such that participants perceived the movie clips in the relatively close (M = 5.00) versus distant (M = 2.50) temporal proximity conditions to follow each other more closely in time. These results are corroborated by the estimated amount of time between the movie clips. Participants in the relatively close temporal proximity condition estimated that there were 0.27 min between the clips; compared to 2.63 min in the relatively distant temporal proximity condition; $F(1, 29)$ = 25.65, p < 0.001. Additionally, as expected, the positive film clip was rated as more positive than the negative film clip (M = 5.23 vs. 2.27 respectively, paired t-test value = 8.99, p < 0.001).

3.1.2. Overall evaluations

A one-factor ANOVA on overall evaluations yielded a significant effect of temporal proximity; $F(1, 32) = 4.65$, $p < 0.05$. Consistent with the coping view (H1b) but not the memory based sequential positioning view (H1a), participants in the relatively close temporal proximity condition evaluated the experience more favorably than those in the relatively distant temporal proximity condition ($M = 4.72$ vs. 3.84 respectively). Additionally, the covariate, that is, familiarity with the movie clip was significant; $F(1, 32) = 5.83$, $p < 0.05$.

3.2. Discussion

Results from our first study support a coping (vs. memory based sequential positioning) account that overall evaluations are more favorable when conflicting emotions arise in relatively close (vs. distant) temporal proximity. But, what is the specific coping process underlying this effect?

Extant research suggests that consumers can employ diverse coping strategies, with reappraisal and suppression being two of the most commonly used strategies in everyday life (Gross, 2002; Gross & John, 2003). Reappraisal involves reconstruing the meaning of a situation in a way that changes its emotional impact and is generally associated with beneficial effects such as reducing negative emotion experience and/or increasing positive emotion experience (Gross & John, 2003). In contrast, a suppression strategy modifies the behavioral facet of emotional experiences (such as inhibiting the outward expression of emotion), but leaves the subjective experience of negative emotion unaltered or even heightened (Gross, 1998; Gross & John, 2003). For example, Gross (1998) showed that participants who were told to suppress emotional reactions to a film clip eliciting negative emotion experienced as much negative emotion as those who simply watched the film. In contrast, participants who were told to reappraise by detaching themselves so that they would not emotionally respond to the film, experienced significantly reduced negative emotion compared to the watch participants.

However, a majority of coping research has examined coping with purely negative emotional experiences. In contrast, there is limited work examining the effectiveness of coping strategies in the context of conflicting emotions. Some anecdotal evidence suggests that reappraisal may indeed be helpful. For example, Finkel, Slotter, Luchies, Walton, and Gross (2013) showed that a reappraisal intervention for 21 min, where participants reappraised conflicting situations in marriages, safeguarded against decline in marital quality over one year. These authors also demonstrated that the effect was partially driven by a reduction in conflict related distress among intervention participants. Moreover, cognitive dissonance research suggests that contradictory thoughts or inconsistency between thoughts and actions result in tensions or discomfort, which prompts cognitive reappraisal of the underlying elements to minimize this uncomfortable state (Festinger, 1957). However, this work does not focus on sequential conflicting emotions, nor does it examine the interplay between coping strategies and experiential patterns such as temporal proximity.

In the current research, we suggest that reappraisal is a plausible strategy for coping with sequential conflicting emotions that arise in relatively close (vs. distant) temporal proximity due to several reasons: First, as discussed previously, past literature suggests that the beneficial effect of relatively close temporal proximity between conflicting emotional events on overall evaluations can be attributed to a cancellation effect whereby the pain associated with a negative event is minimized (Thaler & Johnson, 1990; Cowley, 2008). A cancellation effect is consistent with a reappraisal strategy (but not a suppression strategy) because reappraisal (vs. suppression) reduces the experience of negative emotion. Second, past research shows that consumers engage in active temporal reframing of positive and negative events to bolster the cancellation effect (Cowley, 2008). For example, in Cowley's (2008) research, gambling winners who were motivated to gamble again,

recategorized big wins and losses into the same temporal category. The process of active reframing aligns with a reappraisal strategy which also involves reinterpretation of emotional experiences. Third, extant research contends that although, reappraisal has associated cognitive costs (Sheppes & Meiran, 2008), it depletes cognitive resources to a much lesser extent than suppression (Richards & Gross, 2000). Thus, cognitively costly strategies such as suppression (vs. reappraisal) may deplete coping resources afforded by positive emotion to replenish resources drained by negative emotion in close temporal proximity, which in turn may impede the coping effectiveness of relatively close temporal proximity. Together, these findings point to reappraisal rather than suppression, as a likely coping process underlying the beneficial impact of relatively close (vs. distant) temporal proximity on evaluations of conflicting emotional experiences.

In the next study, we provide supportive evidence for reappraisal in relatively close (vs. distant) temporal proximity. Specifically, we examine the moderating impact of individual reappraisal tendencies on the relationship between temporal proximity and overall evaluations of sequential conflicting emotions. Past research has demonstrated that there are differences in individuals' tendency to habitually use reappraisal (Gross & John, 2003). High (vs. low) reappraisers spontaneously use reappraisal to cope with stressful situations. We expect that if indeed reappraisal underlies the favorable effect of relatively close (vs. distant) temporal proximity on overall evaluations, then this effect should be replicated for consumers with a higher tendency to habitually use reappraisal (because they have the ability to reap the coping benefits of close temporal proximity). And this effect should be eliminated for consumers with a lower tendency to habitually use reappraisal (because they don't have the ability to reap coping benefits of close temporal proximity).

H2. Overall evaluations will be more (vs. less) favorable in relatively close (vs. distant) temporal proximity among consumers with higher individual reappraisal tendencies. This effect will be eliminated among consumers with lower individual reappraisal tendencies.

We also test and rule out suppression as an alternate coping strategy. Specifically, since we do not expect suppression to occur in relatively close temporal proximity, we do not anticipate a significant moderating impact of individual suppression tendencies on the relationship between temporal proximity and overall evaluations. Our organizing framework for the proposed coping process is visually represented in Fig. A.1. The figure also highlights our contribution vis-à-vis past research.

Next, we describe the method and results for study 2 which examines H2. In contrast to the first study, which used an improving
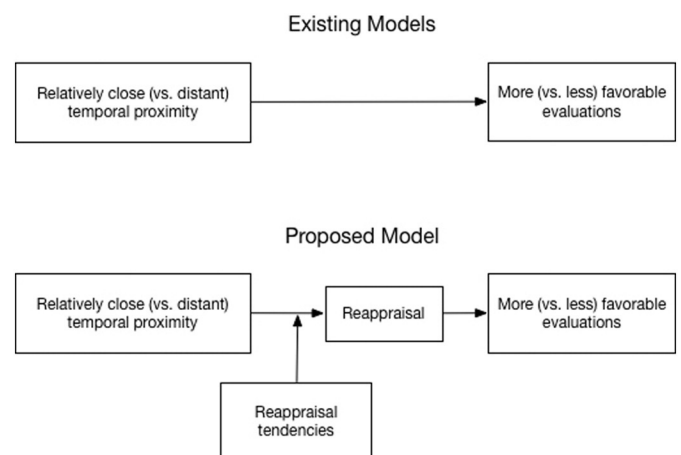

Fig. A.1. Existing (study 1) vs. proposed (study 2) model of coping with sequential conflicting emotions.

sequence of conflicting emotions, the next study employs a declining sequence of conflicting emotions, providing further credence to the coping view that successful coping occurs in relatively close temporal proximity irrespective of the sequential ordering between conflicting emotions (Linville & Fischer, 1991).

4. Study 2: method

Ninety undergraduate students (mean age: 22, 50% male) from a West coast university participated in a jellybean sampling study (similar to Lau-Gesk, 2005) in exchange for course credit, and were randomly assigned to manipulated temporal proximity (relatively close vs. distant) condition. Additionally, we measured individual reappraisal and suppression tendencies (Gross & John, 2003).

Consistent with previous research (Lau-Gesk, 2005), a sequential conflicting emotional experience was created by providing participants with three different flavored jellybeans to evoke positive (orange flavor), negative (popcorn flavor), or neutral (marshmallow flavor) affective reactions. Following Lau-Gesk (2005), in the relatively close temporal proximity condition, the positive flavor was immediately followed by the negative flavor while the neutral flavor jellybean was sampled at the end of the experience (positive-negative-neutral). In the relatively distant temporal proximity condition, participants tasted the neutral flavored jellybean in-between the positive and negative flavors (positive-neutral-negative). The jellybeans were provided to participants in non-transparent envelopes numbered as 1, 2, 3 according to the experiential pattern (i.e. relatively close vs. distant temporal proximity).

A pretest was conducted with 51 participants to test the affective reactions to the jellybeans as well as to examine whether the temporal proximity manipulation worked as intended. In particular, after tasting each of the jellybeans, participants rated their feelings on a scale anchored by −7 (very unpleasant), 0 (neither pleasant nor unpleasant), and +7 (very pleasant). Paired t-tests revealed that the orange flavor (positive) was rated more positively than the marshmallow flavor (neutral) (3.63 vs. 1.08, paired t value = 4.46, $p < 0.001$), while the popcorn flavor (negative) was rated more negatively than the marshmallow flavor (neutral) (−2.43 vs. 1.08, paired t value = 5.14, $p < 0.001$). We also calculated an absolute difference score between affective responses to flavors 1 and 2. The difference score between the first and second flavors should be significantly greater due to the greater affective contrast between the first and second flavor in the relatively close (vs. distant) temporal proximity condition (i.e. positive-negative in close vs. positive-neutral in distant temporal proximity conditions). A t-test showed that the absolute difference between flavor 1 and 2 was significantly greater in relatively close versus distant temporal proximity condition, suggesting that the temporal proximity manipulation was successful (M = 6.69 vs. 4.20 respectively; $t = 2.31$, $p < 0.05$).

Next, in the main study, after tasting the three jellybeans, participants answered a set of questions assessing their overall evaluations of the jellybean sampling experience using a seven-point scale (good, favorable, positive, where 1 = not at all, 7 = very, α = 0.90). Participants then completed the reappraisal (α = 0.80) and suppression (α = 0.77) subscales of Gross and John's (2003) emotion regulation questionnaire to assess individual reappraisal and suppression tendencies. Examples of items measuring reappraisal tendencies included, "When I want to feel more positive emotion, I change the way I'm thinking about the situation," and "When I'm faced with a stressful situation, I make myself think about it in a way that helps me stay calm." Examples of items assessing suppression tendencies included, "I control my emotions by not expressing them," and "When I'm feeling positive emotions I'm careful not to express them." A reappraisal and suppression tendency score was then computed following Gross and John (2003), where higher scores indicate greater individual reappraisal and suppression tendencies respectively. After completing the questionnaire, participants were debriefed and thanked.

4.1. Results

4.1.1. Reappraisal tendencies

We conducted a multiple regression analysis predicting overall evaluations from the mean-centered level of participants' individual reappraisal tendency score, temporal proximity (0 = distant; 1 = close), and their two-way interaction. Analysis showed that temporal proximity had a significant main effect on overall evaluations (β = 0.82, $t = 3.17$, $p < 0.01$), indicating that relatively close (vs. distant) temporal proximity resulted in more favorable evaluations. Although, not hypothesized, there was a significant effect of individual reappraisal tendencies (β = −0.52, $t = −2.13$, $p < 0.05$), suggesting that low (vs. high) reappraisers evaluated the jellybean experience more (vs. less) favorably. It is possible that since there are cognitive costs associated with reappraisal, high reappraisers are chronically drained of coping resources resulting in less favorable evaluations of the conflicting experience in the absence of enabling conditions such as close temporal proximity.

Importantly, as expected, the temporal proximity X individual reappraisal tendencies interaction reached significance; β = 0.70, $t = 2.08$, $p < 0.05$. To explore the nature of the interaction, we performed a spotlight analysis at plus and minus one standard deviation from the mean of participants' reappraisal tendency score (Aiken & West, 1991; Fitzsimons, 2008; Irwin & McClelland, 2001). In support of H2, the spotlight analysis demonstrated that the slope of temporal proximity was significant and positive among participants with high reappraisal tendencies, suggesting that overall evaluations were more favorable in relatively close (vs. distant) temporal proximity; β = 1.34, $t = 3.77$, $p < 0.001$. Among participants with low reappraisal tendencies, the slope of temporal proximity was not significant showing that temporal proximity had no effect on evaluations of the jellybean experience; β = 0.29, $t = 0.79$, $p > 0.43$ (see Fig. A.2).

Moreover, to identify the region of reappraisal tendencies where the effect of temporal proximity on overall evaluations turns from non-significance to significance, we further probed the interaction through the Johnson and Neyman (1936) technique, using the PROCESS macro in SPSS (see also Model 1 Hayes, 2013). The analysis showed that temporal proximity had a significant effect on overall evaluations when the values of reappraisal tendencies (raw values; Hayes, 2013) were above 3.49 but not for reappraisal tendencies below 3.49 (see Table A.1).

4.1.2. Suppression tendencies

Next, we conducted a multiple regression analysis predicting overall evaluations from the mean-centered level of participants' individual suppression tendencies, temporal proximity, and their two-way interaction. However, analysis only yielded a significant main effect of temporal proximity; β = 0.81, $t = 3.08$, $p < 0.01$. The main effect of individual suppression tendencies (β = 0.16, $t = 0.75$, $p > 0.45$) or the
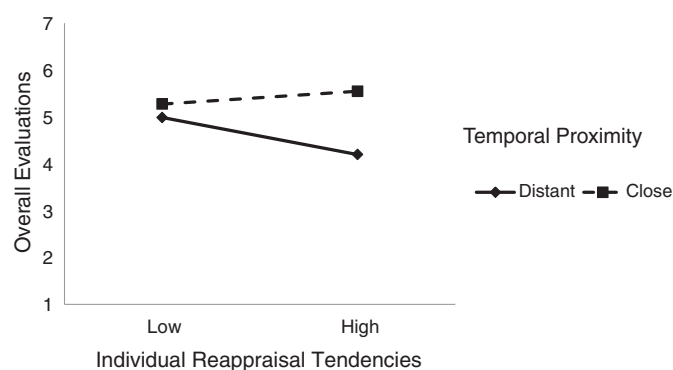

Fig. A.2. Overall evaluations of the jellybean experience as a function of temporal proximity and individual reappraisal tendencies (study 2).

Table A.1
Regions of significance for the conditional effects of temporal proximity on overall evaluations as moderated by individual reappraisal tendencies (study 2).

Individual reappraisal tendencies	Effect	t	p-Value
2.00	−0.48	−0.71	0.48
2.15	−0.38	−0.59	0.56
2.30	−0.27	−0.46	0.65
2.45	−0.16	−0.30	0.76
2.60	−0.06	−0.12	0.91
2.75	0.05	0.11	0.92
2.90	0.15	0.37	0.71
3.05	0.26	0.69	0.49
3.20	0.36	1.07	0.29
3.35	0.47	1.52	0.13
3.49	**0.57**	**1.99**	**0.05**
3.50	**0.58**	**2.03**	**0.045**
3.65	**0.68**	**2.56**	**0.012**
3.80	**0.79**	**3.05**	**0.003**
3.95	**0.89**	**3.45**	**<0.001**
4.10	**0.99**	**3.70**	**<0.001**
4.25	**1.10**	**3.82**	**<0.001**
4.40	**1.21**	**3.83**	**<0.001**
4.55	**1.32**	**3.78**	**<0.001**
4.70	**1.42**	**3.71**	**<0.001**
4.85	**1.53**	**3.61**	**<0.001**
5.00	**1.63**	**3.52**	**<0.001**

Note: Values in boldface indicate regions of significance.

interaction between temporal proximity and individual suppression tendencies ($\beta = -0.09$, $t = -0.34$, $p > 0.73$) did not reach significance.

4.2. Discussion

Study 2 replicated the results of the first study and extended it in important ways. Specifically, and consistent with our proposition that reappraisal is the underlying driver of the beneficial effects of relatively close (vs. distant) temporal proximity between positive and negative emotion, we showed that overall evaluations were more favorable for sequential conflicting emotional experiences in relatively close (vs distant) temporal proximity only for participants with a greater tendency to habitually use reappraisal. Conversely, temporal proximity did not impact overall evaluations for participants with a lower tendency to chronically use reappraisal. Furthermore, we ruled out an alternate coping strategy, suppression, by demonstrating that individual differences in suppression tendencies do not moderate the effect of temporal proximity on overall evaluations.

5. General discussion

This research examines retrospective evaluations of sequential conflicting emotional experiences. In doing so, it constructs differing predictions for evaluations of conflicting emotional experiences from two distinct literature streams on memory based sequential positioning (Biswas et al., 2010) and coping (Linville & Fischer, 1991). Specifically, in study 1 we show that relatively close (vs. distant) temporal proximity between movie clips arousing positive emotions and those eliciting negative emotions produced more favorable evaluations of the overall experience. This is consistent with the coping (but not memory based sequential positioning) view that when conflicting emotions arise in relatively close (vs. distant) temporal proximity, positive emotion counteracts the deleterious effects of negative emotion. In study 2, we pinpoint the specific coping process that drive the beneficial effect of relatively close temporal proximity, by establishing reappraisal as the underlying driver. We also rule out alternate strategies such as suppression. These insights are novel and extend past research which has acknowledged the importance of temporal proximity between conflicting emotions in coping (Labroo & Ramanathan, 2007; Lau-Gesk, 2005; Linville & Fischer, 1991), but has not pinpointed specific coping processes.

We also establish reappraisal tendencies as a new previously unrecognized individual difference variable that can moderate the effect of temporal proximity on evaluations of sequential conflicting emotions. This adds to existing research on the role of individual difference variables in coping with conflicting emotions (Hong & Lee, 2010; Kramer et al., 2009; Williams & Aaker, 2002). Moreover, by demonstrating the joint impact of reappraisal tendencies and temporal proximity on overall evaluations, we are one of the few studies to examine the interplay between experiential patterns and individual difference variables (e.g. Lau-Gesk, 2005). In addition, we contribute to extant research on reappraisal which has primarily examined reappraisal of single-valenced negative emotions rather than conflicting emotions (Giuliani, McRae, & Gross, 2008; Mauss, Cook, & Gross, 2007).

An issue that merits future inquiry is why memory based sequential positioning effects such as recency (e.g. Biswas et al., 2010) did not account for evaluations of sequential conflicting emotional experiences in our first study. We highlight a few differences between our works that may help shed light on a plausible explanation. First, Biswas et al.'s (2010) research examined preferences for individual experiential cues based on recall of sequential positioning. In contrast, our research emphasizes overall evaluations, which is a summary judgment of the entire experience. Second, we used experiential patterns that differ from those used by Biswas et al. (2010), who examined conflicting experiential sequences consisting of three cues (two equally desirable and one undesirable). In contrast, our first study consisted of two conflicting cues eliciting positive emotion and negative emotion respectively. Thus, departure of our results from the sequential positioning view may be a result of using different experiential patterns. Further, past research suggests that dissimilar cues accentuate a recency effect, while reducing primacy effects (Biswas et al., 2014). Since our study 1 participants watched two dissimilar movie clips in both close and distant temporal proximity conditions, this may have heightened recency effects in both conditions thus, resulting in non-significant differences. Dissimilar stimuli may have also accentuated the influence of temporal proximity on overall evaluations, a plausible process based on research demonstrating temporal proximity effects on evaluations among consumers who focus on dissimilarity (vs. similarity) of conflicting affective sources (Lau-Gesk, 2005). Further, Biswas et al. (2010) examined sensory experiences (DVs included items that explicitly tapped into preferences for sensory experiences such as taste and sound; e.g. "Between the two musical pieces that you heard, which one did you like more"? p. 512), while our research emphasized judgments of the affective component of consumption experiences which may also explain the prevalence of coping over memory processes.

Given the ubiquity of conflicting emotional experiences, marketing managers will want to take note of our main findings that close proximity between oppositely-valenced events is critical for successful reappraisal of such experiences. For example, given their temporal separation, the potential of a free dessert to compensate for a disappointing appetizer seems rather limited in its impact on overall evaluations of the dining experience. Instead, more favorable evaluations will ensue if a disappointing appetizer is immediately followed by a tasty main dish. Or in the Disneyland example, favorable evaluations are more likely to ensue if experiences are structured such that consumers have an opportunity to meet their favorite Disney character immediately after (or before) the long wait to buy tickets. Similarly, structuring shopping sequences such that oppositely valenced emotional events (receiving a coupon or discount; shipping delay) are engineered to immediately follow one another may enhance consumers' overall evaluations of the experience. However, our findings suggest that close proximity between positive and negative events may not be sufficient in and of itself to aid reappraisal among consumers who do not use reappraisal habitually. In these situations, a reappraisal intervention by providing external opportunities to reinterpret a conflicting emotional experience may facilitate coping. For example, a customer disappointed with an appetizer can be explicitly assured by a manager that these types of negative

experiences are rare and that the main dish will more than make up for it. Likewise, in marketing experiences that involve consumer sampling such as wine tasting or viewing a series of movie trailers, our findings suggest that consumer evaluations will be higher when conflicting stimuli follow each other immediately and if reappraisal instructions are also provided at the beginning of the sampling activity.

At the same time, there are some limitations in our research that opens avenues for future research. For example, following past research (e.g. Gross & John, 2003), we compared reappraisal to suppression as alternate drivers of temporal proximity effects. However, consumers can employ other coping strategies such as distraction, which has been shown to be less cognitively costly than reappraisal (e.g. Sheppes & Meiran, 2008). Indeed, it will be interesting to examine whether distraction is more effective when conflicting emotions arise in distant proximity and coping resources are scarce. Moreover, past research contends that there are several types of reappraisal tactics such as distancing and reinterpretation (Davis, Gross, & Ochsner, 2011). Our research does not pinpoint the specific reappraisal tactic that consumers employ in the relatively close temporal proximity condition. As well, reappraisal can occur at various points in time. For instance, reappraisal is frequently conceptualized as an antecedent focused strategy deployed before full blown emotional responses (Gross, 1998). However, it can also take place later while an emotional event is unfolding (Sheppes & Meiran, 2008). This latter form of online reappraisal is more representative of coping in everyday life but it is more cognitively costly than antecedent focused reappraisal. Given our emphasis on individual differences in reappraisal tendencies in study 2, online reappraisal seems to be a likely strategy in close temporal proximity when coping resources are available. However, future research can explicitly compare antecedent focused reappraisal to online reappraisal strategies as moderators of the relationship between temporal proximity and consumer evaluations. Finally, recent research suggests that analytic (vs. holistic) processing styles influence the relationship between experiential patterns (e.g. final trend) of temporal sequences and evaluations (Bhargave & Montgomery, 2013). Future work can examine whether differences in processing style can account for the joint impact of coping strategies and temporal proximity on evaluations of sequential conflicting emotional experiences.

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