Research Report

Looking ahead or looking back: Current evaluations and the effect of psychological connectedness to a temporal self☆

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Abstract

This research examines how consumers evaluate a target in the present that is positively associated with them in the past or future. We suggest that such evaluations are affected by the perceived connectedness between their current self and temporal self, that is, the self at that particular point in time of association with the target in the past or future. A strong (vs. weak) connectedness will result in a more (vs. less) favorable evaluation of the target—be it a product, brand, or pro-social cause. Converging evidence supporting our premise is found in three studies.

Keywords: Psychological connectedness; Consumer evaluations; Self-continuity; Temporal self; Past future

Introduction

Marketers sometimes use a “time travel technique” to transpose consumers to their past or future to promote products or brands in the present. For example, a nostalgia-based ad for Coca-Cola portrays the good old days, with family members happily enjoying the drink, encouraging consumers to buy it now. Wellcome, one of the biggest supermarkets in Hong Kong, also turns the clock decades back, showing a young man playing hide and seek with his girlfriend inside the store. This ad aims to evoke consumers’ fond memories in order to increase their current patronage. Other promotion strategies take consumers to the future. A powerful ad by DeBeers, for example, shows a young couple a snippet of their future selves—as an old couple cherishing the lifelong diamond ring, with the song “Stand By Me” playing in the background. An ad for Collagen by Watsons, a skin-care product, features a woman seeing her future self decades later, enjoying the product as a loyal customer. Implicit in all these time-travel appeals is the assumption that consumers’ sense of self is continuous: The imagined positive experiences with these products or brands will spill over to enhance consumers’ preferences for them now. In this paper, we challenge such an assumption and examine conditions when such an appeal might or might not work. We predict that consumers’ current evaluation of a target associated with their temporal self should be a function of how psychologically connected they feel now with that temporal self. When the degree of this connectedness is weak, these time-travel appeals may fail to work well, resulting in a much less favorable current evaluation as compared to when the degree of this connectedness is strong.

Conceptual framework

Future self or past self may seem like a social other

Our research draws on prior work in philosophy suggesting that a person is a succession of overlapping yet different selves (Parfit, 1971, 1984). What matters is the perceived connectedness

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between these different selves (as exemplified by continuity in, for example, temperament, values, goals, likes and dislikes). When self-continuity is high, the future self and the current self may be seen as being the same person. When the degree of connectedness is low, the future self may be viewed as a different identity—akin to being a distinct individual.

This philosophical view has inspired a number of recent studies in marketing examining how consumers make tradeoffs between benefits received now and benefits received in the future. Apparently, when consumers feel less connected with their future self, they feel more liberated to care only about the present, since any negative consequences of their myopic behaviors are seen as being borne by someone else: the unconnected self in the future. Consequently, it has been shown that consumers are more likely to behave impatiently (Bartels & Urminsky, 2011), save less for retirement (Hershfield et al., 2011), and engage in unethical decision-making now (Hershfield, Cohen, & Thompson, 2012).

Other research in psychology has shown that one’s past self can also be viewed as and treated like a social other. For example, people may strategically belittle their past self in order to enhance the current self. The underlying mechanism of this strategy is shown to be the same as that of social comparison, whereby people compare with a worse-off other (Wilson & Ross, 2000). Iyer and Jetten (2011), when examining the function of nostalgia, find that thinking about things that one appreciated in the past may or may not help alleviate any current hardship. The positive effect of nostalgia requires that “who one is now” feels like “who one was in the past.”

**Our proposition: connectedness to the temporal self affects current evaluation**

Based on the above-mentioned idea that a person is a succession of overlapping selves, we suggest that a strong versus weak connectedness with a temporal self will affect an individual’s current evaluation of a target that his or her temporal self interacted with or will interact with. To elaborate, since a weak connectedness leads the temporal self (in the past or future) to be seen as a distinctly different person whereas a strong connectedness leads this temporal self to be seen as similar to oneself now, we suggest that consumers’ current evaluations of a target—positively associated with the temporal self—will be evaluated differently from (weak connectedness) or similarly to (strong connectedness) how the target might have been evaluated if it was associated with the current self. As a result, a more (vs. less) favorable current evaluation is likely to occur with strong (vs. weak) connectedness.

Our research extends the literature on psychological connectedness in three different ways (Bartels & Urminsky, 2011; Hershfield et al., 2011, 2012). First, unlike prior work that has primarily focused on inter-temporal tradeoffs, we are interested in consumers’ current preferences for products and brands. Second, we include three highly relevant but distinct contexts to test our premise, like owning a product (Study 1), interacting with a brand (Study 2), and helping a pro-social cause (Study 3). Across these studies, we employ three different operationalizations of connectedness and examine dependent measures like current attitudes (Studies 1 & 2) and actual monetary donations (Study 3). Finally, we simultaneously straddle the past and future to suggest that a common principle holds for both temporal perspectives—something that has not been done in previous research.

**Study 1: product ownership**

One of the most well-established findings in consumer judgment is that ownership boosts evaluation (e.g., mere ownership effect: Beggan, 1992; endowment effect: Kahneman, Knetsch, & Thaler, 1990). Consumers evaluate products they own more favorably than similar products they do not own. Consequently, with the aim of enhancing product preference, marketing communication often encourages consumers to imagine themselves owning the target product. The question that one may ask is “What if a product is not owned by the self currently, but by the self in the past (e.g., five years ago) or in the future (e.g., five years later)?” Our theory predicts that a strong (vs. weak) connectedness with this temporal self (five years away) leads to a more (vs. less) favorable evaluation now.

Drawing on Bartels and Rips (2010), we manipulated connectedness by encouraging participants to imagine undergoing a significant life-changing event (like converting to a new religion), which is likely to break self-continuity at the time of the event’s occurrence, dividing the sense of self into two: one that remains connected to the temporal self and the other that is disconnected from it. As shown in Fig. 1, in the future perspective, if a life-changing event occurs four years later, the self who owns the product (five years later) should be disconnected from the current self. If the event occurs six years later, however, this temporal self should still be connected to the current self. Similarly, in the past perspective, if the event occurred six years ago, the self who owned the product (five years ago) should be connected to the current self, but if the event occurred four years ago, this temporal self should be disconnected from the current self.

**Pretest**

To examine the efficacy of our connectedness manipulation, a pretest (N = 65) was conducted with a 2 (connectedness: strong—the life-changing event occurs six years from now; weak—the life-changing event occurs four years from now) × 2 (temporal perspective: future, past) between-subjects design. Participants in each condition were asked to vividly imagine converting to a new religion (Appendix A) and to then report their perceived connectedness with “the self five years away” on the Inclusion of Others in the Self scale (IOS). This scale has been used to measure both social connectedness and the connectedness between one’s current and future selves (Aron, Aron, & Smollan, 1992; Bartels & Urminsky, 2011; Hershfield et al., 2012; Li & Zhang, 2014). Specifically, it is composed of 11 pairs of overlapping circles, with overlaps ranging from 0% to 100%, in 10% increments. Participants were asked to select the pair that best represented the degree of connectedness between “current self” and their “self in five years” (future condition) or “self five years ago” (past condition). They also answered questions relating to the perceived positivity of the change (“Would this change make you a better or worse person?”; −3 = definitely a worse person to 3 = definitely a
better person), mood (1 = very bad/negative to 7 = very good/positive), and confidence in their answers (1 = not at all to 7 = very certain/sure/confident).

A 2 × 2 ANOVA was performed on the IOS scale. As predicted, only a main effect of connectedness was observed (Mstrong = 63.10%, SD = .22; Mweak = 45.29%, SD = .19; F(1, 61) = 11.39, p < .01). Similar patterns were obtained for both future (Mstrong = 62.86%, SD = .25; Mweak = 45.24%, SD = .21; p < .05) and past perspectives (Mstrong = 63.33%, SD = .20; Mweak = 45.33%, SD = .18; p < .05). No other effects were observed (ps > .90). Positivity of the change, mood, and confidence showed no differences (Fs < 1).

Main study

One hundred seventy undergraduate students participated in this study for course credit. They were assigned to one of four conditions to do two ostensibly unrelated tasks. In the first task, they read the life-changing scenario. In the second task, they were served (a) a picture of a T-shirt and were asked to imagine owning it and (b) a scenario in which partners give benefits to each other to get a comparable benefit in return, while communal relationships involve partners focusing on each other’s needs, offering their unquestioning care and concern. Interestingly, a brand is able to satisfy consumers equally well by positioning itself as being either a professional, efficient business partner (exchange relationship) or a supportive, caring friend (communal relationship). This is because the type of relationship heightens different behavioral norms but does not necessarily influence the perceived brand quality and consumers’ attitudes toward it (Aggarwal, 2004).

How will consumers evaluate a brand now that is positively experienced by the self in the past or future? One possibility is that compared to those in an exchange relationship, consumers in a communal relationship may evaluate the brand more positively if they have a strong connectedness with their temporal self since communal relationships are more emotionally oriented (Clark & Taraban, 1991) and thus may carry over across time to a greater extent. On the other hand, as long as equally enjoyable experiences occur to a temporal self, a strong (vs. weak) connectedness may lead to such experiences being perceived similarly by the current self regardless of the relationship type. Our prediction is consistent with the latter view: a strong (vs. weak) connectedness will lead to a highly favorable evaluation in both communal and exchange relationships.

Pretests

We conducted a pretest (N = 45) to check the efficacy of our relationship manipulation. Participants were first presented with the two relationship scenarios in the present timeframe, modified interactions with a brand. In addition, instead of manipulating, we measured the connectedness to temporal self as an individual variable.

Prior research in consumer behavior shows that consumers form relationships with brands in ways that are similar to how people form relationships with each other in an interpersonal context (Fournier, 1998). Research in marketing has examined two kinds of consumer–brand relationships: exchange and communal (Aggarwal, 2004; Aggarwal & Law, 2005; Aggarwal & Zhang, 2006; Wan, Hui, & Wyer, 2011). Exchange relationships are those in which partners give benefits to each other to get a comparable benefit in return, while communal relationships involve partners focusing on each other’s needs, offering their unquestioning care and concern. Interestingly, a brand is able to satisfy consumers equally well by positioning itself as being either a professional, efficient business partner (exchange relationship) or a supportive, caring friend (communal relationship). This is because the type of relationship heightens different behavioral norms but does not necessarily influence the perceived brand quality and consumers’ attitudes toward it (Aggarwal, 2004).

Study 2: brand interaction

In Study 2, we examine if the results of our previous study extend beyond product ownership to a context of a consumer’s

![Fig. 1. Study 1: connectedness manipulation.](image-url)
from prior research (Study 3; Aggarwal, 2004). They were asked to vividly imagine themselves interacting with a brand of coffee shop—Mike’s Coffee Shop—described as offering good-quality products and great service, but differing in the type of consumer–brand relationship. In the exchange relationship condition, the brand was described as “worth every penny” and “a good business partner,” whereas in the communal condition, the brand was described as one that “cares about you” and “is like a friend.”

The participants then responded to a 14-item manipulation check based on previous research (Aggarwal, 2004; Aggarwal & Law, 2005; Clark & Mills, 1993). Eight items tapped into communal relationship norms (e.g., they care for you, help you in time of need, do things for you without expecting anything back, etc.), and six tapped into exchange norms (e.g., they expect to get paid for each benefit provided, sell you good products to make more money in the long run, you pay for what you get, etc.). The results showed that those in the communal condition reported a higher communal score ($M = 7.40$, $SD = 1.00$; $M_{exchange} = 4.25$, $SD = 1.19$; $F(1, 42) = 13.12, p < .01$), but a lower exchange score ($M = .76$) than the latter ($M_{communal} = 4.57$, $SD = 1.12$; $M_{exchange} = 5.24$, $SD = .71$; $F(1, 43) = 5.80, p < .05$). Hence, our relationship manipulation was deemed effective.

**Main study**

The goal of this study was to investigate the following: when the brand interactions in the two relationships were experienced by a temporal self rather than the current self, would consumers’ current evaluation of the brand be more favorable when they felt strongly versus weakly connected with this temporal self, and if the effect would be similar for communal and exchange relationships? To examine these questions, 322 Amazon Mechanical Turk participants (65.84% male; 84.78% Caucasian; 69.25% ≤ 35 years of age; 81.06% earning ≤ $75,000 per year) were recruited for a payment of $0.65. The study had a connectedness (continuous) × 2 (temporal perspective: future, past) × 2 (relationship with own brand: exchange, communal) between-subjects design. The first factor was measured and the other two were manipulated.

The participants were first asked to think of the characteristics that shape their self-concept—their personality, temperament, likes and dislikes, beliefs, values, and goals (Frederick, 2003)—and to indicate the connectedness between their current self and their self a couple of years later (future condition) or in the past (past condition) on the IOS scale described in Study 1. After that, they were presented with the same scenario of Mike’s Coffee Shop being a communal or exchange relationship partner as in the pretest, but modified with the future (two years later) or past (two years ago) perspectives. Participants then answered a set of questions including their current evaluations of this brand (1 = unfavorable/dislike it/bad rating to 9 = favorable/like it/good rating), mood, and confidence (as in Study 1).

**Results**

Following Spiller, Fitzsimons, Lynch, and McClelland (2013) and Aiken and West (1991), we first ran a regression analysis with the averaged current brand evaluation ($\alpha = .92$) as the dependent variable, and time perspective ($\alpha = .92$, $0 = $futur\text{e}, 1 = past$), relationship ($\alpha = communal, 1 = exchange$), connectedness (the continuous measure), and all their two-way and three-way interactions as independent variables. As predicted, time perspective had no main effect or interactions ($ps > .40$). To simplify the analysis, this factor was dropped from further investigation.

A regression analysis was again performed on current brand evaluation, with relationship, connectedness, and their interaction as independent variables. The results showed that for both relationships, participants’ current evaluation of the brand was more favorable when they had a strong (vs. weak) connectedness with the temporal self. Fig. 2 shows the results at one standard deviation above and below the mean of connectedness. As predicted, the slope of connectedness was significant and positive in the exchange ($\beta = .01, t = 2.08, p < .05$) and communal ($\beta = .011, t = 2.44, p < .05$) relationships. No other effects were observed ($ps > .70$).

For the purpose of illustration, the results at one standard deviation above and below the mean of connectedness are shown for future and past perspectives separately (Fig. 2). Consistent with the results of Study 1, no differences were observed on mood or confidence ($ps > .20$).

**Study 3: donation to an organization**

Study 3 broadens the applicability of our predictions by using actual behavior now (donation) as a measure of consumers’ current evaluation of an organization they had cared for in the past or will care for in the future. We also employed a connectedness manipulation that (a) was easy to operationalize outside a lab, and (b) tapped more overtly into the proposed mechanism by directly manipulating the perceived similarity (vs. differences) between the current and temporal selves.

**Method**

The study had a 2 (connectedness: strong, weak) × 2 (temporal perspective: future, past) between-subjects design. One hundred and twenty-one undergraduate students were randomly approached by an experimenter on campus and received a cash payment of $3.00 for participation. First, participants were asked to do a brief thought exercise. In the strong connectedness condition, they were asked to think about important aspects that were (will be) similar to their selves five years ago (later) and to write down any supporting evidence. In the weak connectedness condition, they were asked to think about important aspects that were (will be) different from their current selves five years ago (later) and to note any supporting evidence. In the weak connectedness condition, they were asked to think about important aspects that were (will be) different from their current selves five years ago (later) and to note any supporting evidence. In the weak connectedness condition, they were asked to think about important aspects that were (will be) different from their current selves five years ago (later) and to note any supporting evidence.
evidence in writing. Then on a separate page, as a manipulation check, they answered a question regarding their perception of this future (past) self (1 = not at all connected to current self to 9 = extremely connected).

Participants then read a brief description of a pro-social organization called Big Cat Rescue (www.bigcatrescue.com), said to be dedicated to ending the abuse of captive big cats such as tigers, leopards, lions, etc., and saving them from extinction. Participants were asked to vividly imagine that they had cared (will care) for this organization a lot five years ago (past condition) or five years later (future condition). Afterward, they were told that this organization is asking for their support now and seeking monetary donations. Participants then indicated whether they were willing to donate money now from the $3.00 payment they received for participation (yes/no). Those willing to donate were asked to indicate the actual amount they wished to contribute, which was then collected.

Results

A 2 × 2 ANOVA was conducted on the connectedness perception as a manipulation check. As predicted, only the main effect of connectedness was observed ($M_{\text{strong}} = 6.53$, $SD = 1.32$; $M_{\text{weak}} = 5.56$, $SD = 1.70$; $F(1, 117) = 12.44$, $p < .001$), with similar patterns in the future ($M_{\text{strong}} = 6.76$, $SD = 1.30$; $M_{\text{weak}} = 5.64$, $SD = 1.73$; $p < .05$) and past conditions ($M_{\text{strong}} = 6.37$, $SD = 1.33$; $M_{\text{weak}} = 5.50$, $SD = 1.70$; $p < .05$). No other effects were found ($F$s < 1).

Central to our prediction, a logistic regression with participants’ decision to donate as the dependent variable and connectedness, temporal perspective, and their interaction as the independent variable revealed only a main effect of connectedness ($\chi^2 = 4.87$, $p < .05$). As expected, those in the strong connectedness condition were more likely to donate (78%) than those in the weak condition (53%). This pattern held for both the future (83% vs. 52%; $p < .05$) and past (74% vs. 54%; $p = .084$) perspectives. The result for the amount of actual donation was consistent. A 2 × 2 ANOVA showed a main effect of connectedness such that those in the strong connectedness condition donated more than those in the weak connectedness condition ($M_{\text{strong}} = $1.77, $SD = 1.19$; $M_{\text{weak}} = $1.19, $SD = 1.32$; $F(1, 114) = 6.51$, $p < .01$). As predicted, the pattern of actual donation was similar for the future ($M_{\text{strong}} = $1.79, $SD = 1.14$; $M_{\text{weak}} = $1.08, $SD = 1.27$; $p = .055$) and past ($M_{\text{strong}} = $1.76, $SD = 1.24$; $M_{\text{weak}} = $1.26, $SD = 1.36$; $p = .10$) perspectives. No other effects were observed ($ps > .60$).
This research report examines a straightforward issue: To what extent do consumers’ positive experiences with a target in the past or future carry over to boost their current preference for it? As mentioned in the Introduction, marketers often employ sales tactics that encourage consumers to imagine owning or interacting with their product or brand retrospectively or prospectively. Across the three studies, we demonstrate a clear mechanism that guides the extent to which such time-travel techniques will be effective: Consumers’ current evaluation of a target that is positively associated with a temporal self depends upon the strength of the connectedness between their current and temporal selves. When consumers perceive a strong relative to weak connectedness with the temporal self, their current evaluation of the target is more likely to be enhanced.

This conclusion has important implications for future research. First, many factors can influence consumers’ current judgment and evaluation of a target. One of these factors, as shown in this paper, is the location of the time this target resides in. We looked at both the past and future perspectives, and our results demonstrate parallel patterns: The degree of connectedness matters both when looking ahead and looking back on a target. However, there have been some interesting differences found between the past and future temporal frames in prior research (e.g., Caruso, Gilbert, & Wilson, 2008; Zhao, Dahl, & Hoeffler, 2014). It is not our intention to compare these two perspectives, and for the topic we focus on, the commonality between them prevails. Future studies interested in a direct comparison of the future and past perspectives on current evaluation should examine the conditions under which effects of past versus future perspectives may differ with the connectedness perception.

Second, we use different ways to increase (or decrease) consumers’ connectedness with a temporal self. In Study 1, we broke participants’ perceived self-continuity using a life-changing event. In Study 2, we measured connectedness as an individual difference. In Study 3, we activated connectedness or disconnect- edness by shifting consumers’ focus on important similarities or differences between the self now and self in the past or future. In real life, some dates or life-stages may serve as natural markers that can heighten perceived disconnectedness with a temporal self. Examples include starting a family, retiring from a life-long job, and migrating to another country. Even some mundane events like birthdays or a new calendar year, when made salient, may also help partition the self into different stages temporally (Tu & Soman, 2014). To enhance the generalizability of our findings, future research should (a) employ natural ways to operationalize connect- edness, (b) compare commonalities and differences between various connectedness manipulations, and (c) conduct longitudinal studies to gather more real-life evidence. Further, given that none of our studies have direct process data as evidence of the under- lying mechanism, future research may also wish to test our proposed process more directly.

Third, our studies examine the transfer of positive experiences with a target located at a different point of time. This is because marketers often present enjoyable scenarios of the featured products or brands. Would a similar mechanism hold for negative experiences? That is, would a strong (weak) connectedness to a temporal self result in a less (more) favorable current evaluation of the product or brand that is negatively associated with that temporal self? Or is connectedness to one’s past or future selves always good?

Finally, given the similarity of social connectedness and inter-temporal connectedness, some personal or cultural factors of connectedness perception are fruitful areas to explore. For example, prior research suggests that in general, people in interdependent cultures feel more connected to others around them than do those in independent cultures. This might also lead to differences in connectedness to their temporal self such that those in interdependent cultures may also have a greater connectedness to both their future and past selves than do those in independent cultures. A downstream effect of this difference is that those in the interdependent culture may demonstrate a greater inter-temporal consistency in their evaluations.

Going beyond evaluations, social connectedness and happiness are shown to be closely linked (Mauss et al., 2011). Would connectedness to the past or future self also influence consumers’ current happiness? Maybe those who are strongly connected to their temporal selves are also those who are happier now? This and other intriguing issues await future research.

Appendix A. Connectedness manipulation for Study 1

Future condition strong (weak) connectedness.

“In this task, please imagine the following scenario as vividly as you can. After each line, close your eyes and imagine it as if it were happening to you…”

“Imagine that six (four) years later, your family and you will become religious in a new faith. This is a magical moment—the faith comes to you suddenly yet naturally; you will adopt it completely and find spiritual fulfillment in it. This new faith will, in a way, fundamentally change your life, your views of the world, and your interactions with the environment and others around you. This religion will provide guides for how to live your life, but it will not be a strict doctrine that you will have to follow.”

Past condition strong (weak) connectedness.

“In this task, please imagine the following scenario as vividly as you can. After each line, close your eyes and imagine it as if it were happening to you…”

“Imagine that six (four) years ago, your family and you became religious in a new faith. This was a magical moment—the faith came to you suddenly yet naturally; you adopted it completely and find spiritual fulfillment in it. This new faith, in a way, fundamentally changed your life, your views of the world, and your interactions with the environment and others around you. This religion provided guides for how to live your life, but it was not a strict doctrine that you had to follow.”