

LISA A. CAVANAUGH, JAMES R. BETTMAN, and MARY FRANCES LUCE\*

Marketers often employ a variety of positive emotions to encourage consumption or promote a particular behavior (e.g., buying, donating, recycling) to benefit an organization or cause. The authors show that specific positive emotions do not universally increase prosocial behavior but, rather, encourage different types of prosocial behavior. Four studies show that whereas positive emotions (i.e., love, hope, pride, and compassion) all induce prosocial behavior toward close entities (relative to a neutral emotional state), only love induces prosocial behavior toward distant others and international organizations. Love's effect is driven by a distinct form of broadening, characterized by extending feelings of social connection and the boundary of caring to be more inclusive of others regardless of relatedness. Love—as a trait and a momentary emotion—is unique among positive emotions in fostering connectedness that other positive emotions (hope and pride) do not and broadening behavior in a way that other connected emotions (compassion) do not. This research contributes to the broaden-and-build theory of positive emotion by demonstrating a distinct type of broadening for love and adds an important qualification to the general finding that positive emotions uniformly encourage prosocial behavior.

*Keywords:* positive emotions, prosocial behavior, love, social connection, broaden and build

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## Feeling Love and Doing More for Distant Others: Specific Positive Emotions Differentially Affect Prosocial Consumption

Prosocial behavior is of great interest to consumers and marketers alike (e.g., Agrawal, Menon, and Aaker 2007). Behaviors such as civic participation, volunteering, donating money, or buying products that benefit a good cause are

often regarded as undifferentiated (Collett and Morrissey 2007). However, most organizations that promote prosocial behaviors desire a very specific consumption behavior (they want people to, e.g., buy, recycle, donate, or vote *in a particular way*) as opposed to just any prosocial or helpful behavior. Thus, understanding when and why people engage in specific prosocial consumption behaviors is of great interest to consumer behavior researchers, sociologists, psychologists, and practitioners (e.g., Batson et al. 2008; Piliavin and Charng 1990).

Although a variety of personal, motivational, or contextual factors might induce prosocial behavior (Batson et al. 2008), organizations often rely on positive emotions in their marketing and advertising to encourage such behaviors. Consumer products companies (e.g., General Electric, Nike, Procter & Gamble), nonprofit organizations (e.g., American

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\*Lisa A. Cavanaugh is Assistant Professor, Department of Marketing, Marshall School of Business, University of Southern California (e-mail: [lisa.cavanaugh@usc.edu](mailto:lisa.cavanaugh@usc.edu)). James R. Bettman is Burlington Industries Professor of Business Administration, Fuqua School of Business, Duke University (e-mail: [jrb12@duke.edu](mailto:jrb12@duke.edu)). Mary Frances Luce is Senior Associate Dean for Faculty and Robert A. Ingram Professor, Fuqua School of Business, Duke University (e-mail: [mlyce@duke.edu](mailto:mlyce@duke.edu)). This article is based on the first author's dissertation. The authors thank Barb Fredrickson and the PEP lab for their encouragement and support of this program of research, Kristin Diehl and Debbie MacInnis for their helpful comments, and Nicholas J. Jackson for his statistical assistance. Jeffrey Inman served as associate editor for this article.



Red Cross, The Nature Conservancy), and even political candidates (e.g., the Obama presidential campaign) regularly employ positive, but often diffuse, emotional themes in advertising. In the prosocial domain, marketers often use positive emotions interchangeably. The underlying assumption seems to be that all positive emotions increase all prosocial behaviors (i.e., if consumers *feel good*, they are more likely to *do good*). Indeed, previous researchers have linked generalized positive affect or the effects of positive versus negative affect to multiple prosocial behaviors, including helping, generosity, interpersonal understanding, and monetary donations (e.g., Small and Verrochi 2009; for a review, see Isen 2001). However, the effects of different specific positive emotions have not generally been considered for prosocial behavior (for an exception contrasting amusement and gratitude, see Bartlett and DeSteno 2006) or charitable giving.

We examine the general question of whether specific positive emotions differentially motivate particular behaviors by testing the novel hypothesis that specific positive emotions may have different effects on prosocial behavior directed toward close versus distant others. Conditions of chronic poverty and natural disasters (e.g., famine, floods, earthquakes) in many of the poorest areas of the world (e.g., sub-Saharan Africa, South Asia; United Nations 2011) often prompt government and nonprofit agencies in those areas to search for help from people abroad (e.g., the United States). In addition, organizations regularly solicit donations to preempt and address major global issues (e.g., deforestation, illiteracy, disease) across continents. Thus, consumers are often asked to contribute to distant others about whom they have no personal knowledge and to organizations addressing problems with which they have no personal experience. Aggregate giving data suggest that these requests tend to be at a considerable disadvantage compared with those from closer organizations that are known entities. For example, U.S. citizens gave nearly \$316 billion to charitable organizations in 2013, the majority of which went to local religious (32%) and local educational (13%) organizations, with only 6% of all giving going to international organizations and international disasters (Giving USA 2013). We use this important and challenging problem of promoting giving to distant others as a context within which to study our proposed approach of using specific positive emotions to predict and influence behavior.

In marketing, research has shown that love, hope, pride, and compassion have important influences on consumers (e.g., Belk and Coon 1993; Cavanaugh et al. 2011; MacInnis and De Mello 2005; Small and Verrochi 2009), and all are regularly employed in marketing appeals in prosocial consumption and charitable giving contexts. How might the use of different positive emotions affect the success of appeals for helping distant others? We hypothesize and show that whereas positive emotions (vs. neutral emotional states) typically enhance prosocial behavior aimed at close others, only love (not hope, pride, or compassion) enhances prosocial behaviors aimed at distant others. Although love, hope, and pride share positive feelings, love is distinct from hope and pride in that it also generates feelings of social connection, enhancing consumers' propensity to feel caring and exhibit concern toward those with whom they are not related (i.e., others with whom psychological and physical

proximity are not shared). Thus, love ultimately changes the boundary of caring and concern to include more distant others. We also examine whether social connection alone is sufficient for giving to distant others by comparing love with a closely related emotion, compassion, which also enhances social connection; however, compassion does so while producing both positive and negative feelings. Notably, love, but not compassion, increases giving to distant others, validating our contention that the combination of social connection and positive feelings (compared with the co-occurrence of positive and negative feelings found in compassion) generates a specific form of broadening associated with prosocial behaviors toward distant others.

Thus, our research contributes to the consumer emotions literature, the broaden-and-build theory of positive emotion (Fredrickson 1998, 2001; Fredrickson et al. 2008), and the understanding of prosocial behavior. We enrich the consumer emotions literature by expanding the set of positive emotions and mechanisms (e.g., broadening) considered. With respect to the broaden-and-build theory, previous tests have shown that all positive emotions broaden in a similar way, leading to a wider range of attention, thoughts, and actions. However, as we have noted, our research is the first to suggest and show that love broadens in a particular way, by shifting the boundary of caring and sense of social connectedness toward distant others. The finding that a specific positive emotion broadens in a distinct way, leading to predictable outcomes that are differentiable from other positive emotions, is an important contribution to the broaden-and-build theory of positive emotion (Fredrickson 1998, 2001, 2009; Fredrickson et al. 2008). Documenting that differential forms of broadening are possible also provides new insight to the consumer emotions literature by providing a new set of characteristics (beyond common notions such as valence and arousal) with which differences among emotions may be conceptualized and tested. Finally, our findings contribute to the prosocial behavior literature by distinguishing different types of beneficiaries of prosocial behavior (close vs. distant others) and by challenging the assumption that positive emotions generally and uniformly encourage prosocial behaviors. Again, this insight follows from our demonstration that not only does broadening represent a mechanism by which positive emotion generates action (as established by Fredrickson) but, further, different positive emotions broaden differently (as we establish herein).

First, we review the prosocial behavior literature and identify an important and underexplored dimension of prosocial behavior: beneficiary focus. We then review the consumer emotions literature and describe the nature and function of specific positive emotions (i.e., love, hope, pride, and compassion), identifying both social connection and the absence of co-occurring negative feelings as key to love's novel effect on behaviors. We then argue that love can lead to certain types of prosocial behavior (i.e., behaviors that benefit distant others). Four studies show that love—either as a persistent trait or momentary emotion—is unique among positive emotions in promoting prosocial behaviors toward distant others. We demonstrate love's effect by both measuring (for dispositional emotion) and manipulating emotion (using personal memories and advertisements) and showing its impact on multiple distant other



beneficiaries (e.g., distant individuals, international humanitarian and environmental organizations).

### PROSOCIAL BEHAVIOR

Prior research has shown that designated beneficiaries can influence the likelihood of consumers purchasing products and supporting fundraising appeals (Small and Verrochi 2009; Strahilevitz and Myers 1998). Consumers are more likely to donate when fundraising benefits an identifiable victim (Small, Loewenstein, and Slovic 2007) or generates sympathy and compassion by featuring a sad-faced victim (Small and Verrochi 2009). Individual differences in personal relatedness, prosocial personality characteristics, gender identity, and moral identity also influence whether consumers help or give (Penner and Finkelstein 1998; Reed, Aquino, and Levy 2007; Winterich, Mittal, and Ross 2009). For example, Winterich, Mittal, and Ross (2009) find that women who reported higher importance of moral identity were more likely to donate to out-groups. A common feature across these studies is that they involve some perception of a designated beneficiary—that is, the people or cause that will benefit from the prosocial behavior.

One important dimension along which prosocial behaviors vary is beneficiary focus, and beneficiaries can be described in terms of distance, broadly interpreted. The beneficiaries of prosocial behaviors (i.e., the people or entity helped) can vary widely. They can range from psychologically and geographically close others (e.g., local groups, parks, neighbors) to more distant others (e.g., international groups, rainforests, refugees). In general, positive feelings make consumers more willing to help close others (Waugh and Fredrickson 2006)—that is, people more psychologically near to them (e.g., relatives, neighbors, local community members). Such psychological distance to beneficiaries can be influenced by many things (e.g., geographic distance), not just social identity (e.g., the in-group/out-group distinction studied by Winterich, Mittal, and Ross 2009). For example, even among generally unknown or even potential out-group beneficiaries, psychological distance can be an important differentiator among classes of appeals (e.g., domestic vs. foreign aid funds).

### POSITIVE EMOTIONS

Marketing research on specific emotions has historically emphasized contrasts between positively and negatively valenced emotions (e.g., Chang and Pham 2013; Griskevicius et al. 2009) and differences between specific negative emotions such as anger, fear, sadness, and disgust (e.g., Cryder et al. 2008; Lerner and Keltner 2001; Lerner, Small, and Loewenstein 2004; Raghunathan and Pham 1999). Positive emotions often have been characterized as relatively undifferentiated (Ellsworth and Smith 1988; Isen 2001; Smith and Ellsworth 1985), with the exception of arousal differences. Consumer and marketing researchers who have examined different positive emotional states have overwhelmingly emphasized happiness (Sauter 2010) and compared positive emotions characterized by or differing largely in terms of arousal, such as upbeat versus warm feelings (Burke and Edell 1989), excitement versus contentment (Kim, Park, and Schwarz 2010), pride versus contentment (Griskevicius, Shiota, and Nowlis 2010), happiness

versus peacefulness (Agrawal, Menon, and Aaker 2007), happiness versus calmness (Labroo and Rucker 2010), and nonrelaxed versus relaxed positive emotion (Pham, Hung, and Gorn 2011). Moreover, researchers have not considered whether specific positive emotions could differentially influence charitable giving.<sup>1</sup>

We go beyond arousal-based distinctions by examining a set of positive emotions (i.e., love, hope, pride, and compassion) that we hypothesize will have specific effects on behaviors that benefit distant others. Our approach to examining distinct positive emotions is based on the broaden-and-build theory (Fredrickson 1998, 2001), which describes the nature and general shared function of positive emotions as distinct from negative emotions. Unlike negative emotions, which narrow people's focus to help manage and respond to aversive situations, positive emotions function to broaden attentional, cognitive, and motivational scope to allow for new perspectives and experiences (e.g., Fredrickson 1998, 2001; Fredrickson and Branigan 2005; for a divergent view, see Gable and Harmon-Jones 2008). Broadening is not a function of arousal (Fredrickson and Branigan 2005). Our framework both leverages and contributes to the broaden-and-build theory of positive emotion by using an analysis of the specific properties of love, hope, pride, and compassion to derive hypotheses regarding a unique type of broadening that we predict will be specific to love. Love, hope, and pride are all positive in valence (Fredrickson 1998; Oveis, Horberg, and Keltner 2010) but, we contend, differ in their potential broadening effects.

### Love

Conceptually, the word "love" has been used to capture a range of feelings involving proximity maintenance. Within the marketing and consumer psychology literature streams, "love" has often been used to refer to what are actually the more specific emotions of desire and compassion (Belk and Coon 1993; Goetz, Keltner, and Simon-Thomas 2010; Griskevicius et al. 2009; Oveis, Horberg, and Keltner 2010). Although romantic/sexual desire is an interesting topic, it is not the type of love we examine here. Instead, we focus on the emotion of love experienced in companionate relationships and distinguish that type of love's effects from those of compassion. According to the triangular theory of love, companionate love is characterized by the presence of commitment and intimacy without passion (Sternberg 1986) and is distinct from romantic love (passion + intimacy), fatuous love (passion + commitment), and liking (intimacy; Sternberg 1986). We define love in terms of feelings of warmth and affection toward platonic others (i.e., family and friends) in close, nonsexual relationships. Notably, this is the type of love people most frequently report experiencing, and it is often depicted in marketing appeals (e.g., General Mills, Johnson & Johnson, Procter & Gamble).

Emotion theorists broadly agree that emotions differ in themes and serve distinct functions (e.g., Lazarus 1991). Love functions to foster relationships between human beings. Love (not desire) influences bonding (Gonzaga et al. 2006) and feelings of warmth and closeness (Fitness and

<sup>1</sup>Only one previous article (Small and Verrochi 2009) has examined the effect of specific emotions (happiness vs. sadness) on charitable giving.



Fletcher 1993) in relationships. Notably, research has found loving-kindness meditation to heighten feelings of connection toward novel people at both explicit and implicit levels (Hutcherson, Seppala, and Gross 2008).

### Hope

Hope is described as a person's "yearning for better and believing the wished-for improvement is possible" (Lazarus 2006, p. 16). Hope signals that a concrete positive goal is expected, and it reflects a capability to derive pathways to desired goals and to motivate goal pursuit (Snyder et al. 1991). We define hope in terms of feelings that an expenditure of energy or effort could result in achieving a valued positive change in outcome.

Hope functions to influence perception of goal obstacles and to sustain effort (Ellsworth and Smith 1988; Smith and Ellsworth 1985; Snyder et al. 1991) toward goals for oneself and close others (Reichard et al 2013). Hope further functions to enhance coping potential and expectations (MacInnis and De Mello 2005).

### Pride

Pride is described as "enhancement of one's ego-identity by taking credit for a valued achievement" (Lazarus 2006, p. 16) or experiencing enhancement of one's self or social worth by being credited for a highly valued accomplishment (Lazarus 1991). Pride involves internal attributions and self-credit for valued events (Lazarus 2006) such that a person feels good about him- or herself; it is considered a self-conscious emotion. We define pride in terms of feelings of personal responsibility for achieving a valued positive outcome.

Pride functions to provide information about a person's current level of status in a group (Tracy and Robins 2007). Because pride involves attribution of positive events to the self (Roseman, Antoniou, and Jose 1996), it also is a socially disengaging emotion, promoting increased distance between the self and others (Kitayama, Mesquita, and Karasawa 2006).

### Compassion

An emotion that may be closer to love is compassion. Some view compassion as a distinct emotion (Lazarus 1991), whereas others view it as a variant or blend of love and sadness (Shaver et al. 1987). Compassion is described as "the feeling that arises in witnessing another's suffering and that motivates a subsequent desire to help" (Goetz, Keltner, and Simon-Thomas 2010, p. 2) and helps explain why sad-faced children increase observer giving (Small and Verrochi 2009). Compassion motivates caretaking of weak or suffering others when exposed to another's harm (Oveis, Horberg, and Keltner 2010). Notably, compassion and love differ in terms of antecedent events: whereas love's antecedents are positive, compassion's antecedents are negative (Goetz, Keltner, and Simon-Thomas 2010). Owing to compassion's focus on alleviating evident suffering (i.e., a negative antecedent) and its co-occurring negative and positive feelings, we argue that the broadening associated with love, which we hypothesize to be the basis for our effects, should not be evident for compassion.

In summary, specific positive emotions have distinct functions and lead to different levels of social connection. We conjecture that these distinctions cause them to differ in

their potential broadening effects with important implications for behavior. Love is distinct from hope and pride in terms of its generation of social connection. Love is also distinct from compassion, which can enhance social connection but commingles positive and negative feelings. Next, we present our theory and hypotheses of why love has unique behavioral effects within the realm of prosocial behavior.

## CONCEPTUAL DEVELOPMENT: THEORY AND HYPOTHESES

### $H_1$

Previous findings have suggested that when people experience positive emotions, they help close others, consistent with broaden-and-build (e.g., Waugh and Fredrickson 2006) and related theories. Thus, we hypothesize that love, hope, and pride will lead to helping close others. Although this hypothesis is consistent with prior findings on positive affect and helping (e.g., Isen 2001), we believe it is important first to empirically replicate effects consistent with previous work before presenting our unique contribution. Thus, we show that the positive emotions we examine all affect behaviors toward close others. Our focal contribution is then to show that specific positive emotions actually lead to different types of prosocial behavior—namely, differential effects of specific positive emotions on behaviors that benefit distant others, as we articulate in  $H_2$  and  $H_3$ . In Studies 1 and 2, we measure behaviors toward close others in addition to behaviors toward distant others. For these close-other behaviors, we expect to replicate previous findings related to positive valence. More formally, we hypothesize the following:

$H_1$ : Positive emotions increase contributions to close others relative to a neutral emotional state.

### $H_2$ and $H_3$

In contrast to the uniform predictions for all positive emotions in  $H_1$ , we anticipate that only love and not other positive emotions (i.e., hope, pride, and compassion) will induce contributions to distant others. As we outlined previously, love promotes a level of social connection (i.e., feelings of closeness and enhanced relationship with others) that hope and pride do not. Specifically, love should widen the range (in terms of type and number) of cared-for people. This propensity to increase social connection to distant others distinguishes love from hope and pride; thus, love broadens in a way hope and pride do not.

We attempt to clarify the role of social connection more completely by comparing love and compassion. Both love and compassion are characterized by high levels of social connection, but love is characterized by positive feelings, whereas compassion is characterized by co-occurring positive and negative feelings. We hypothesize that positive emotion-based broadening is a precondition for the effects specified, and thus, we do not expect that compassion will have effects on giving to distant others.

These distinctions and the following studies are the first examination of the possibility of different forms of broadening generated by specific positive emotions. Note that our prediction that love (but not hope, pride, compassion, or neutral emotions) will increase donations to distant others runs



counter to the intuitive notion that love would cause people to focus resources only on one's loved ones (e.g., friends and family, who are presumably the focal target of love, featured in advertising). We derive our (opposite) hypothesis by combining a specific analysis of the function of love with the "broaden" aspect of broaden-and-build theory. Thus, love serves to bond people with others, but, consistent with the status of love as a clearly positive emotion, we hypothesize that it actually does so in a way that results in effects on not only those who are close but also those who are further away.

In summary, we expect consumers experiencing love to increase prosocial behaviors that benefit distant others more than the other specific positive emotions we examine and a neutral state. More formally, we hypothesize the following:

- H<sub>2</sub>: Love (but not hope, pride, or compassion) increases contributions to distant others relative to a neutral emotional state.  
 H<sub>3</sub>: Compared with hope and pride, the impact of love on behaviors that benefit distant (but not close) others is mediated by love's impact on feelings of social connection.

These hypotheses allow for more precise predictions regarding positive emotion by linking the functions of specific emotions with particular features of behavior. We have proposed that prosocial behaviors can be characterized in terms of beneficiary focus (i.e., close vs. distant others). We hypothesize that love increases prosocial behaviors that benefit distant others (relative to hope, pride, compassion, and neutral emotions) owing to its tendency to increase feelings of social connection while coupled with positive feelings (but not mixed feelings). Thus, love produces a form of broadening not associated with all positive emotions. We examine these predictions across four studies using both measured and manipulated emotions.

#### STUDY 1: DISPOSITIONAL LOVE AND HOPE DIFFERENTIALLY PREDICT PROSOCIAL CONSUMPTION BEHAVIOR FOR CLOSE AND DISTANT OTHERS

Study 1 tests whether people's propensity to experience certain positive emotions influences their willingness to engage in prosocial behaviors that benefit close and distant others. Specifically, Study 1 tests whether dispositional love and dispositional hope lead to different patterns of prosocial consumption behavior. We expect prosocial behaviors that benefit close others to reveal general (i.e., undifferentiated) effects of positive emotion on helping (i.e., both dispositional love and dispositional hope should increase behaviors that benefit close others), consistent with previous research. However, we expect dispositional love (but not dispositional hope) to predict increased behaviors that benefit distant others.

#### Method and Procedure

*Participants and setup.* Eighty-two students participated in a 20-minute study on feelings and consumer choice. The sample consisted of 37 men, 44 women, and 1 respondent who omitted gender, ranging in age from 18 to 41 years ( $M = 21.4$  years,  $SD = 3.2$ ). To dissociate the emotion procedure from the dependent measures of interest, participants were told that different researchers had pooled together their respective questionnaire packets and that they would be completing three separate studies, which included a filler task. Study 1 used a

measured, within-subject design in which dispositional emotions were measured for each participant and social distance of beneficiary was manipulated within subjects (close/distant).

*Dispositional emotion measures.* Each participant completed multi-item measures for dispositional love (six items) and dispositional hope (seven items; Shiota 2004; Shiota, Keltner, and John 2006). For each item, participants were asked to indicate the extent to which each statement accurately described them on a seven-point scale (1 = "strongly disagree," and 7 = "strongly agree"; for all items, see the Web Appendix). Dispositional means were standardized across participants.

*Prosocial consumption intentions.* Later in the study, session participants were asked to complete a paper-and-pencil consumer choice survey gauging the likelihood of engaging in various consumption behaviors over the coming year on a seven-point scale (1 = "extremely unlikely," and 7 = "extremely likely"). The list included eight prosocial consumption items as well as filler items (e.g., "see a foreign film," "attend a live music concert"). The prosocial consumption items were designed to tap two types of beneficiaries—close and distant others. We averaged the four close-others items ( $\alpha = .71$ ; e.g., "donate used items/clothing to a charitable organization to help local families in need") to create a close-others behavior score. We averaged the four distant-other behaviors ( $\alpha = .80$ ; e.g., "donate money to a charitable organization benefiting rainforest conservation in foreign countries"; for all items, see the Web Appendix) to create a distant-others behavior score. Pretest participants ( $N = 31$ ) had assessed who would benefit from the behavior for each of these items on a seven-point scale (1 = "close others," and 7 = "distant others"). The distant-other behavior items were perceived to benefit distant others ( $M_{\text{distant}} = 5.3$ ) significantly more than the close-other behavior items ( $M_{\text{close}} = 2.6$ ;  $t(30) = 15.82, p < .0001$ ).

#### Results

*Preliminary analyses.* Preliminary analyses on the dispositional emotion measures showed that the measured subscales were reliable (love:  $\alpha = .80$ ; hope:  $\alpha = .81$ ).

*Hypothesis tests.* We predicted that dispositional love but not dispositional hope would be associated with prosocial consumption behaviors that benefit distant others. To test this prediction, we ran a 2 (dispositional emotion: love, hope)  $\times$  2 (distance: close, distant) mixed-effects model with subject-random intercept and distance-random slope to account for repeated measurements within subjects. We observed a significant effect for dispositional love ( $F(1, 79) = 6.57, p < .01$ ), dispositional hope ( $F(1, 79) = 7.09, p < .009$ ), and distance ( $F(1, 79) = 204.31, p < .0001$ ) and a significant interaction between distance and dispositional hope ( $F(1, 79) = 5.65, p < .02$ ).<sup>2</sup> We found no significant differences for filler items.

<sup>2</sup>Effects are consistent when each behavior type is analyzed separately—that is, when both dispositional love and dispositional hope scores are entered simultaneously into a model for behaviors benefiting distant others ( $F(2, 79) = 8.85, p < .0003$ ) and for behaviors benefiting close others ( $F(2, 79) = 13.67, p < .0001$ ). Dispositional love ( $B = .58$ ;  $F(1, 79) = 14.41, p < .0003$ ), but not dispositional hope ( $B = -.05$ ;  $F(1, 79) < 1, n.s.$ ), was a significant predictor of behaviors benefiting distant others. In contrast, both love ( $B = .35$ ;  $F(1, 79) = 6.55, p < .01$ ) and hope ( $B = .33$ ;  $F(1, 79) = 7.08, p < .009$ ) predicted behaviors that benefit close others.



### Discussion

Study 1 provides initial evidence of the effects of specific positive emotions on different types of prosocial behavior. Dispositional love (but not hope) predicts behaviors that benefit distant others, whereas both love and hope similarly predict behaviors for close others. However, Study 1 has some limitations. Specifically, we measured emotion rather than manipulating it, and we were unable to assess social connection directly. In the next three studies, we directly manipulate emotion and measure social connection to provide a more stringent test of our hypotheses.

#### STUDY 2: LOVE AND HOPE LEAD TO DIFFERENT PATTERNS OF PROSOCIAL CONSUMPTION BEHAVIOR FOR CLOSE AND DISTANT OTHERS

Study 2 tests whether momentary experiences of love and hope lead to different patterns of prosocial consumption. Specifically, we designed Study 2 to test whether incidental love would increase intentions to perform prosocial behaviors that benefit distant others more than incidental hope. Again, we expect prosocial behaviors that benefit close others to reveal general (i.e., undifferentiated) effects of positive emotion on helping (i.e., both hope and love should lead to greater intentions to perform behaviors that benefit close others than the neutral condition). However, love (but not hope) should increase prosocial behaviors that benefit distant others.

#### Method and Procedure

**Emotion induction pilot study.** Sixty-five students completed a comprehensive pretest of the emotion induction procedure, self-reflective writing, which has been used successfully in many studies (e.g., Labroo and Rucker 2010; Lerner and Keltner 2001; Small and Verrochi 2009). Participants were randomly assigned to one of four emotion conditions (hope, love, pride, or neutral) and asked to answer two questions on the computer. First, depending on the condition, they were asked to describe three to five situations that made them feel a focal emotion (hope, love, or pride<sup>3</sup>) and to write two to three sentences about each situation. Next, participants were asked to describe in more detail the one situation that made them feel the most of the focal emotion by typing a description of that situation. Those in the neutral condition were asked to describe everyday activities in a format designed to match the detail and length of the positive emotion inductions (Lerner and Keltner 2001).

Following the emotion induction, pilot study participants completed multi-item manipulation check measures for arousal (stimulated and energized;  $\alpha = .83$ ); happiness (happy, joy, elated;  $\alpha = .90$ ); hope (hopeful, optimistic;  $\alpha = .85$ ); love (love, affection;  $\alpha = .93$ ); and pride (proud, confident;  $\alpha = .90$ ) on a nine-point scale (0 = "none," and 8 = "more than ever") based on previously developed measures for assessing specific emotions (Dunn and Schweitzer 2005; Fredrickson et al. 2003; Rottenberg, Ray, and Gross 2007). The results revealed successful emotion induction with clean separation of the focal emotions (see Table 1). Com-

<sup>3</sup>Pride was not part of the main Study 2 design. We included it in the pretest in the interest of manipulations for other studies.

Table 1  
EMOTION INDUCTION PILOT STUDY MEANS FOR EMOTION MANIPULATION CHECKS

Emotion	Valence ("Happiness")	Arousal	Hope	Love	Pride
Love	6.3 <sup>a</sup>	4.7 <sup>a</sup>	6.0 <sup>a</sup>	7.4 <sup>b</sup>	6.9 <sup>b</sup>
Hope	6.9 <sup>a</sup>	5.4 <sup>a,b</sup>	7.7 <sup>b</sup>	5.1 <sup>a</sup>	6.6 <sup>b</sup>
Pride	6.3 <sup>a</sup>	6.3 <sup>b</sup>	6.5 <sup>a</sup>	5.2 <sup>a</sup>	7.8 <sup>c</sup>
Neutral	5.6 <sup>b</sup>	5.2 <sup>a,b</sup>	5.5 <sup>a</sup>	4.5 <sup>a</sup>	5.1 <sup>a</sup>
F	2.16	2.78	4.72	5.97	9.11
p-value	$p < .10$	$p < .05$	$p < .005$	$p < .001$	$p < .0001$

Notes: Different superscript letters (a, b, c) within a given column indicate significant differences at the level of at least  $p < .05$ . Emotion check items for valence (happiness), arousal, hope, love, and pride were measured on a nine-point scale. Example stories include the following: love: "I feel the most love when I receive a phone call out of the blue from an old friend I haven't talked to in a while. It feels great because I know that my friendship means something to them..."; hope: "I hope that I can travel with my friends and enjoy this last opportunity before real life starts. I will have to put a lot of effort into the medical school admissions process..."; pride: "I feel the most pride when thinking of my academic achievements throughout my whole education thus far. Academics have always been important to me..."; neutral: "First I check my planner to see what homework I have to do when I get home from class. I go to eat dinner at 5:45 unless I have a meeting..." The Web Appendix provides additional participant writing samples.

mon themes for the hope, love, and pride stories included academic and career goals, friends and family members, and competitive accomplishments, respectively (for writing samples, see Table 1 and the Web Appendix). In the main study described next, we manipulated emotion only at the levels of love, hope, and a neutral emotional state. We address pride in Studies 3 and 4.

**Participants and setup.** For the main study, we used a 3 (emotion [between subjects]: love, hope, neutral)  $\times$  2 (social distance of beneficiary [within subject]: close, distant) mixed design. Participants were randomly assigned to one of the three emotion conditions that were pretested in the pilot study. Seventy-four university students participated in a study on feelings and consumer choice. The sample consisted of 45 men and 29 women ranging in age from 18 to 30 years ( $M = 20.97$  years,  $SD = 2.62$ ). To dissociate the emotion procedure from the dependent measures of interest, participants were told that they would be completing a multi-part study that consisted of (1) a writing exercise on emotional experience, (2) a consumer choice survey, and (3) measures of their beliefs and opinions. Note that the emotion induction procedure was identical to the directed writing procedure described in the pilot study.<sup>4</sup>

**Prosocial consumption behavior intentions.** After the emotion induction procedure, participants completed a paper-and-pencil consumer choice survey. This survey consisted of the same behavioral intention measures used in Study 1.

<sup>4</sup>Because our conceptualization was based on companionate love, we excluded participants who wrote about desire/passion (i.e., nudity and sex). Across studies, all participants in the love condition wrote stories about companionate love with the exception of five participants ( $n = 5$ ) in Study 2 and two participants ( $n = 2$ ) in Study 3 who were identified by an independent coder and removed before analysis. The pattern of results is consistent if these participants are included; thus, we do not discuss them further.



*Social connection measure.* After completing the dependent measures, participants answered questions about the emotion story written earlier in the study session. They indicated the extent to which a series of statements described what they were feeling while writing (11-point scale; 1 = “not at all,” and 11 = “extremely”). We measured social connection using three items ( $\alpha = .87$ ; “To what extent did [the situation or experience you wrote about] affect the way you thought about your relationship with some individual or group?” “To what extent did you feel connected to another individual or group?” and “To what extent did you feel close or closer to another individual or group?”). We averaged these items to create a social connection score. Finally, participants completed demographic measures (age, gender, and ethnicity).<sup>5</sup>

### Results

*Preliminary analyses.* Analysis of variance tests on the social connection scores ( $F(2, 71) = 13.29, p < .0001$ ) revealed significant emotion effects. Participants in the love condition experienced significantly more social connection than those in the hope ( $M_{\text{love}} = 7.5, M_{\text{hope}} = 5.3; F(1, 71) = 12.13, p < .0009$ ) or neutral ( $M_{\text{neutral}} = 4.4, F(1, 71) = 25.64, p < .0001$ ) conditions.

*Hypothesis tests.* First, we examined  $H_1$  and  $H_2$ , which predicted an emotion by social distance interaction, with love differentially increasing prosocial consumption behaviors that benefit distant others relative to those that benefit close others. In testing the likelihood of engaging in prosocial consumption behaviors, we found a significant effect for emotion ( $M_{\text{love}} = 4.8, M_{\text{hope}} = 4.3, M_{\text{neutral}} = 4.2; F(2, 71) = 3.96, p < .02$ ) and a significant effect for social distance ( $M_{\text{close}} = 5.3, M_{\text{distant}} = 3.5; F(1, 71) = 163.31, p < .0001$ ), reflecting a higher likelihood of prosocial behaviors for closer beneficiaries. More interestingly, and as we predicted, emotion significantly moderated the effect of social distance on likelihood to perform prosocial consumption behaviors ( $F(2, 71) = 5.32, p < .007$ ). Both those in the love ( $F(1, 71) = 7.33, p < .01$ ) and hope ( $F(1, 71) = 6.15, p < .02$ ) conditions expressed significantly higher likelihoods of prosocial consumption that benefits close others than those in the neutral condition ( $M_{\text{love}} = 5.54, M_{\text{hope}} = 5.48, M_{\text{neutral}} = 4.86$ ), in support of  $H_1$ . Thus, with close others, we find an undifferentiated effect of positive emotions on prosocial behaviors, consistent with Study 1 as well as prior research. Also as we predicted, however, those in the love condition expressed significantly higher likelihoods of prosocial consumption that benefits distant others than those in the hope ( $M_{\text{love}} = 4.04, M_{\text{hope}} = 3.11; F(1, 71) = 8.53, p < .005$ ) or neutral ( $M_{\text{neutral}} = 3.50; F(1, 71) = 3.86, p < .05$ ) conditions, in support of  $H_2$ ; hope and neutral were equivalent ( $F(1, 71) = 1.59, n.s.$ ; see the Web Appendix). There was no effect of emotion condition on intention to engage in filler item behaviors ( $F(2, 71) = .24, n.s.$ ;  $M_{\text{love}} = 4.75, M_{\text{hope}} = 4.82, M_{\text{neutral}} = 4.64$ ).

<sup>5</sup>Initial analyses revealed a significant main effect for ethnicity, which did not interact with the manipulations. Specifically, ethnic minorities indicated a greater propensity to perform prosocial consumption behaviors regardless of emotion condition. However, although the results reported herein do not include an ethnicity covariate, including such a covariate does not affect or qualify the results.

Next, we examined our social connection hypothesis ( $H_3$ ) that the impact of love on behaviors that benefit distant (but not close) others is mediated by feelings of social connection. Using the recommended technique for testing conditional indirect effects (Hayes 2013), process analyses (Model 14) confirmed evidence of moderated mediation. The effect of love on distant behaviors was mediated by social connection. We tested this using Hayes' (2013) PROCESS macro with 5,000 bootstrapped samples. To test mediation of a three-group independent variable (Hayes 2013, p. 196), we constructed two dummy variables, X1 and X2, representing the neutral and hope conditions, respectively. Because there were three groups, there are two indirect effects: (1) the indirect effect of a neutral emotion versus love on distant behaviors through social connection and (2) the indirect effect of hope versus love on distant behaviors through social connection.<sup>6</sup> The indirect effect of neutral emotion versus love was  $B = -.4047$  ( $SE = .1713$ ), with a 95% bias-corrected bootstrapped confidence interval (CI) that excluded zero for distant behaviors (95% CI  $[-.7876, -.0906]$ ) but not close behaviors ( $B = .0039, SE = .1525, 95\% CI = [-.3038, .2965]$ ). The indirect effect of hope versus love was  $B = -.2862$  ( $SE = .1358$ ), with a 95% bias-corrected bootstrapped confidence interval that excluded zero for distant behaviors (95% CI  $[-.6059, -.0653]$ ) but not close behaviors ( $B = .0027, SE = .1118, 95\% CI = [-.2146, .2350]$ ), in support of  $H_3$ . These findings provide evidence that the mediational path predicting behavior from emotion is conditioned on the social distance of the beneficiary.

*Content analyses of emotion stories.* We used content analyses to test whether the difference found between emotion conditions could be attributed to differences in emotional intensity, cognitive processing style, or semantic priming. Participants' written passages were analyzed with textual analysis (Linguistic Inquiry and Word Count [LIWC; <http://www.liwc.net/>]). These analyses showed statistically insignificant effects of emotion condition for magnitude-of-emotion words and words related to cognitive processes in the stories, suggesting that differences between conditions are not driven by emotional intensity or cognitive processing style. Love is associated with more social words, but the frequency of social words does not mediate our behavioral effects, casting doubt on semantic priming of social processes as an alternative explanation (for statistical analyses and results, see the Web Appendix; for further elaboration, see the “General Discussion” section).

### Discussion

Study 2 demonstrates that the specific positive emotions of love and hope influence prosocial consumption that benefits close versus distant others in different ways. We predicted that love, characterized by social connection, increases intentions of engaging in behaviors that benefit distant others more than hope, which is lower in social connection; our results support our prediction. In addition, social connection mediates the relationship between emotion and behaviors that benefit distant others. In contrast,

<sup>6</sup>As Hayes (2013) outlines, running PROCESS twice—once with X1 as the IV and X2 as the covariate and once with X2 as the IV and X1 as the covariate—enables the researcher to recover each indirect effect.



both positive emotions (love and hope) increase intentions to perform behaviors that benefit close others over a neutral emotional state, replicating established findings that positive emotion generally increases prosocial behavior for close others.

Given the particular emotions contrasted in Studies 1 and 2, one might argue that hope may be characterized by a unique quality that could explain the difference in reported behaviors. To address this concern, we compare love with a different specific positive emotion (pride) in Study 3. In addition, when comparing emotions it can be difficult to equate strength, and perhaps love tends to be experienced more strongly or as being more positive. To directly address the question of whether magnitude of positivity could predict our findings, we measure and control for positivity in Study 3, allowing for a more stringent test of differential broadening effects. We also employ a different prosocial context intimately linked to marketing (i.e., fundraising) for greater generalizability and examine decisions with real donation consequences.

### STUDY 3: LOVE (NOT PRIDE) INCREASES DONATIONS TO DISTANT OTHERS

Study 2 demonstrates that two specific positive emotions (love and hope) differentially influence engagement in behaviors that benefit distant others. Study 3 tests a different pair of specific positive emotions (love and pride) using a fundraising context. We replicate and extend our social connection findings by showing that love and pride differentially influence to whom (e.g., domestic vs. international funds) consumers give. Note that in Study 2 participants could choose as many prosocial behaviors as they wanted (i.e., no explicit trade-off was required). We designed the Study 3 task so that participants had to decide between beneficiaries (i.e., whether to give the most help to close or distant others), providing a more rigorous test of our hypothesis.

Nonprofit appeals often describe warm moments shared between aid recipients and organizers or depict the proud faces of volunteers who have worked to build homes and clinics, leading consumers to experience different specific emotions (love vs. pride). Could these distinct emotional experiences cause consumers to give in different ways? In Study 3, we conceptually replicate our Study 2 findings, which suggest that love, characterized by social connection, will increase the likelihood of giving to international relief funds, whereas pride, an emotion not characterized by social connection, will not. In Study 3, we focus on monetary giving, holding both charitable organization and overall amount given constant, to better understand consumers' prioritization of beneficiaries. Participants responded to the fundraising appeal with the understanding that their donation decisions had real behavioral consequences (i.e., money would actually be given to the American Red Cross in the way that they designated).

#### Method and Procedure

**Participants and setup.** One hundred seventy-six students completed a study on feelings and consumer choice. The sample consisted of 111 men and 65 women ranging in age from 18 to 29 years ( $M = 20.50$  years,  $SD = 1.12$ ). To dissociate the emotion procedure from the dependent measures

of interest, participants were told that they would be completing a series of short studies from different researchers that had been bundled. The study session consisted of three parts: (1) a writing exercise on autobiographical experience, (2) responding to a fundraising appeal, and (3) a questionnaire about feelings and consumption behaviors.

In Study 3, participants were randomly assigned to one of the three emotion conditions (emotion: love, pride, neutral). After completing the same emotion induction procedure as in Study 2 for the focal emotions in the current study (i.e., love, pride, and a neutral emotion), all participants viewed the same fundraising appeal from the American Red Cross. Adapted from actual materials, the fundraising appeal described the organization's activities and ways in which donors could give to the organization. Participants were asked to make their donation decisions as they really would at this moment and were explicitly told that we would select "1 out of every 20 participants' decisions and actually donate to the American Red Cross" as they had specified.

**Domestic versus international relief fund donation decision.** The donation form that participants received listed two options: a domestic and an international relief fund, both described as providing immediate relief from suffering and long-term support. The order in which these two funds were listed was counterbalanced across participants; we found no order effects. Participants were asked, "If right now you had \$50 to donate, how would you allocate your donation?" They then entered an amount (\$0–\$50) in each of the spaces provided. The dependent measure was total dollars allocated to international relief.

**Social connection and emotion check.** After completing the dependent measures, social connection was measured as in Study 2. Participants were also asked to revisit their stories and recall specifically how they were feeling when writing them. Participants rated the extent to which they felt three positive emotions (i.e., happiness, love, and pride) on 11-point scales (1 = "not at all," and 11 = "extremely") as well as the magnitude of these emotions (e.g., "How much love did you feel?" "How much pride did you feel?") on a 7-point scale (1 = "not at all," and 7 = "very much"). We calculated a measure of positivity (i.e., the average of all three positive emotion items) for each participant to control for general positivity (see Oveis, Horberg, and Keltner 2010). Finally, participants completed demographic measures: age, gender,<sup>7</sup> and ethnicity.<sup>8</sup>

#### Results

**Preliminary analyses.** As recommended in Oveis, Horberg, and Keltner (2010), we included a general positivity measure to control for magnitude of positivity as a possible alternative explanation. Initial analyses revealed a signifi-

<sup>7</sup>Recent findings have suggested that men and women may respond differently to donation requests involving in-groups and out-groups (Winterich, Mittal, and Ross 2009); however, we found no gender differences in likelihood of giving to domestic versus international relief funds in our studies. Moreover, gender did not moderate the effect of emotion on donations.

<sup>8</sup>Consistent with Study 1, ethnic minorities reported a greater propensity to give to distant others (i.e., international funds). Again, the pattern of results and significance of comparisons remain the same with or without ethnicity included. The results we report herein do not contain an ethnicity covariate.



cant main effect for positivity. This effect, however, did not moderate our results. Participants reporting higher general positivity indicated a greater propensity to give to close others (i.e., domestic funds).

Drawing on participants' responses to the social connection items ( $\alpha = .88$ ), we again created a social connection score for each participant. Tests on social connection scores ( $F(2, 172) = 12.53, p < .0001$ ) revealed significant emotion-specific effects. Participants in the love condition reported greater social connection than those in the pride ( $M_{\text{love}} = 8.34, M_{\text{pride}} = 6.54; F(1, 172) = 19.49, p < .0001$ ) or neutral ( $M_{\text{neutral}} = 6.32; F(1, 172) = 18.60, p < .0001$ ) conditions.

**Hypothesis tests.** Examination of dollars donated to international versus domestic relief funds enabled us to test our hypothesis, which predicts that love will lead people to give more to international relief. In a model predicting dollars donated to international relief, we found a marginally significant effect for emotion ( $F(2, 172) = 2.66, p < .07$ ). People experiencing love donated significantly more money to international relief than those experiencing pride ( $M_{\text{love}} = \$20.22, M_{\text{pride}} = \$14.56; F(1, 172) = 3.97, p < .05$ ) or those in a neutral emotional state ( $M_{\text{neutral}} = \$13.60; F(1, 172) = 4.11, p < .04$ ).

We tested for mediation by social connection using PROCESS analyses (Hayes 2013)<sup>9</sup> and requested estimates of the conditional indirect effects at different levels of positivity. The indirect effect of neutral versus love, with 95% bias-corrected bootstrapped confidence interval, was significant at all levels of positivity ( $-1$  SD:  $B = 1.3447, SE = .8623, 95\% \text{ CI} = [.1310, 3.7795]$ ; mean:  $B = 1.8802, SE = 1.0431, 95\% \text{ CI} = [.0834, 4.2751]$ ;  $+1$  SD:  $B = 2.4157, SE = 1.3933, 95\% \text{ CI} = [.1094, 5.6659]$ ). The indirect effect of pride versus love was also significant across all levels of positivity ( $-1$  SD:  $B = 2.4386, SE = 1.4328, 95\% \text{ CI} = [.1119, 5.8799]$ ; mean:  $B = 1.8290, SE = 1.0411, 95\% \text{ CI} = [.0379, 4.1958]$ ;  $+1$  SD:  $B = 1.2193, SE = .8057, 95\% \text{ CI} = [.0725, 3.4443]$ ). These results provide evidence that love's effect on monetary donations to international relief is mediated by social connection, regardless of the magnitude of positivity experienced. Moreover, they provide further evidence that differences found between emotion conditions are attributable to differences in social connection and not emotional intensity.<sup>10</sup>

**Content analyses of emotion stories.** We conducted the same LIWC analyses described in Study 2. Our statistical analyses showed no evidence for the alternative mechanisms discussed. The effects were either insignificant (emo-

tional intensity) or opposite in direction (cognitive processing style). Again, love was associated with more social words, but the frequency of social words did not mediate our behavioral effects, casting doubt on semantic priming of social processes as an alternative explanation (for detailed descriptions and results of our statistical analyses, see the Web Appendix).

### Discussion

Study 3 demonstrates that specific positive emotions lead to giving to different types of recipients (i.e., domestic vs. international relief funds). People feeling love are more likely to give money to international relief than people feeling pride. Again, Study 3 demonstrates that love affects behavior in a way that hope and pride do not. In an additional study (Study 3b), we replicated this result for love using a different comparison emotion (hope) but the same procedure, with the exception of adding multi-item emotion checks. Participants in the love condition reported significantly more love, less hope, and more social connection than those in the hope condition (for details, see the Web Appendix). In a model predicting dollars donated to international relief, we found a significant effect for emotion ( $F(1, 36) = 7.98, p < .008$ ). People experiencing love donated significantly more money to international relief than those experiencing hope ( $M_{\text{love}} = \$19.89, M_{\text{hope}} = \$11.98$ ).

Thus, the emotional state of potential donors does not simply influence whether they give but, more specifically, *to whom* they give—close versus distant others (i.e., domestic vs. international funds). These findings have important implications for universities and nonprofit organizations, which regularly allow donors to decide how to direct monetary gifts, and they also underscore the importance of characterizing positive emotions on the basis of their unique broadening properties.

Studies 2 and 3 show that social connection matters; however, is social connection alone sufficient for broadening? Might the negative feelings that accompany compassion dampen giving to distant others? We hypothesize that this will be the case—that is, that the co-occurring positive and negative feelings characteristic of compassion will not lead to the broadening tendency fostered by love with its characteristic positive feelings. Study 4 addresses this prediction by including compassion along with all the emotion conditions used previously. We also test our hypotheses using a different study approach that is more relevant to marketing communications. Studies 2 and 3 use an established procedure (writing about a personal experience) to induce emotion and measures of behavioral intentions toward close and distant others (Study 2) and monetary giving toward domestic versus international relief funds (Study 3) *within* one organization (American Red Cross). To increase confidence in the validity and generalizability of our findings, Study 4 provides additional evidence using a more naturalistic emotion manipulation and different charitable organizations. We use magazine advertisements to manipulate emotions and then ask participants to make a monetary giving decision involving two different charitable organizations while allowing them a realistic third option of keeping money for themselves.

<sup>9</sup>We conducted mediation analyses using PROCESS (Hayes 2013), which allows model estimation using three or more conditions; Model 7 was specified with 5,000 bootstraps.

<sup>10</sup>We also tested whether the causal structure we identify can be distinguished from one in which love and social connection are switched to predict giving to distant others. In the alternative model, the coefficients for social connection ( $B = .22, t = .41, p = .68$ ) and reported love ( $B = .59, t = .46, p = .65$ ) were not significant. Moreover, the indirect effect of social connection was  $B = .10$  ( $SE = .22$ ), with a 95% bias-corrected bootstrapped confidence interval that included zero ( $95\% \text{ CI} = [-.3355, .5672]$ ). In summary, we find that although higher levels of social connection are associated with feeling more love ( $B = .18, t = 5.93, p < .001$ ), social connection does not directly predict behavior without antecedent love, and the indirect effect of social connection on behavior through love does not yield support for the alternative causal structure.



#### STUDY 4: LOVE DIFFERENTIALLY PREDICTS GIVING TO INTERNATIONAL (VS. LOCAL) CHARITIES

We designed Study 4 to provide further evidence for love's effect on behaviors that benefit distant others. We use advertisements for one brand (Canon) to manipulate five incidental emotions (love, hope, pride, compassion, and a neutral emotion). Including compassion enables us to concurrently examine three social emotions (love, pride, and compassion) in addition to hope and to assess whether the caretaking motives associated with compassion may predict the same effects as love or whether love's broadening effects are unique. Although Study 3's donation allocation had real consequences (i.e., money given to the American Red Cross), it required participants to choose between beneficiaries (i.e., they did not have the option to keep the money). To address this limitation and further increase realism, we included a third option (i.e., keep money for oneself) along with the two different charity organization options: after completing the advertisement evaluation, in a separate task, participants were provided with an opportunity to donate the money toward two different environmental organizations (local vs. international) or to keep the money. We again focus on relative aid to distant (international) versus closer (local) others, but in this case we calculate it in the context of money that people freely chose to give. Specifically, we designed Study 4 so that participants could decide exactly how much they wanted to give to a local environmental group, give to an international group, or keep for themselves (i.e., we made the trade-off apparent). This design provides an additional test of our prediction that love causes a shift toward behaviors that benefit distant others.

#### Emotion Induction Pilot Study for Advertisements

We developed our stimuli with extensive pretesting and a comprehensive pilot study to obtain valid emotion checks (Herr et al. 2012, p. 835). One hundred forty-seven students from the same population as those in the focal study participated in a comprehensive pretest of the emotion induction procedure. Participants were told that they would be completing a study about magazine advertising and that we were interested in consumers' reactions to and memories for advertising. They were randomly assigned to one of five emotion conditions: compassion, hope, love, pride, or neutral. Each participant viewed one Canon camera ad. Across conditions, the layout and slogan ("Capturing Moments Like This") were held constant, but the image and body copy varied with emotion condition (see Table 2 and the Web Appendix). We selected all images for the ads in line with extensive pilot testing with online samples.<sup>11</sup> We adapted the body copy for each emotion from prototypical themes and moments shared in emotion stories written by participants in our previous studies. Notably, the emotion-manipulating advertisements did not contain any reference to the focal emotions being manipulated. This absence of the actual emotion terms (i.e., love, hope, pride, and compassion) provides a conservative, cleaner test compared

with what is likely done in practice, whereby advertisers can and do use the actual emotion words as well.

After viewing the ad, pilot study participants indicated the extent to which they experienced a series of specific feelings while viewing the advertisement on a seven-point scale (1 = "did not experience at all," and 7 = "experienced very intensely"). Each of the focal emotions was assessed with three items using terms reported previously in the emotions literature: compassion ("compassion," "sympathy," "moved";  $\alpha = .80$ ), hope ("hopeful," "optimistic," "encouraged";  $\alpha = .87$ ), love ("love," "affection," "closeness";  $\alpha = .86$ ), pride ("proud," "achievement," "self-assured";  $\alpha = .81$ ), and neutral ("neutral," "unemotional," "indifferent";  $\alpha = .86$ ). We ran a model with the emotion condition and the positivity score entered as predictor variables to assess whether the magazine ads effectively manipulated specific emotions (for details, see Table 3). In summary, the results show that our ad manipulation cleanly differentiated love from all other emotions. In addition, each emotion ad elicited significantly more of the intended focal emotion than any other emotion ad, with one exception (pride).<sup>12</sup> Participants were shown the same ad a second time and then rated their ad-related feelings using single-item measures for the extent to which they had a positive or negative emotional response and how emotional they felt while viewing the advertisement on seven-point scales (1 = "not at all," and 7 = "very"). We found no significant differences between the love ad and the other emotion ads for the single-item measures, with one notable exception: the compassion ad. Planned pairwise comparisons with the love ad

<sup>12</sup>Those in the pride ad condition reported significantly more pride than any other condition; however, they also reported substantial hope. Provided that people view the accomplishments in the pride condition as desirable, it is not entirely surprising that reading about success would also instill hope for that type of success or hope for success more generally. We note that we pretested numerous iterations of a pride advertisement, varying the image and statements used in the body copy. Within an advertising paradigm, the coactivation of hope with pride was recurrent despite numerous attempts to fully isolate pride. The isolation of pride from hope is more readily apparent within a writing paradigm, in which the experiences recalled are individuating (i.e., "I can recall an experience that has made me feel the most pride"), whereas the advertisement is meant to induce pride by drawing on prototypical but hypothetical situations that may or may not be accessible or applicable to that person.

Table 3  
MAGAZINE ADVERTISEMENT PILOT STUDY MEANS FOR  
EMOTION MANIPULATION CHECKS





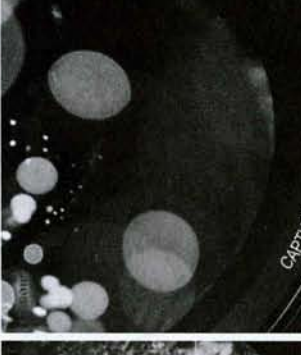
Emotion Ad Condition	Love	Hope	Pride	Compassion	Neutral
Love	<b>4.6<sup>d</sup></b>	3.3 <sup>a</sup>	2.2 <sup>a</sup>	3.6 <sup>b</sup>	3.1 <sup>a</sup>
Hope	3.4 <sup>b</sup>	<b>4.3<sup>c</sup></b>	3.1 <sup>b</sup>	3.8 <sup>b</sup>	3.2 <sup>a</sup>
Pride	2.8 <sup>a</sup>	4.2 <sup>c</sup>	<b>4.0<sup>c</sup></b>	2.9 <sup>a</sup>	3.3 <sup>a</sup>
Compassion	4.2 <sup>c</sup>	3.5 <sup>a,b</sup>	2.5 <sup>a</sup>	<b>4.6<sup>c</sup></b>	3.0 <sup>a</sup>
Neutral	3.4 <sup>b</sup>	3.8 <sup>b</sup>	3.5 <sup>b</sup>	3.3 <sup>a,b</sup>	<b>4.7<sup>b</sup></b>
F	32.22	8.69	18.39	17.96	4.99
p-value	$p < .0001$	$p < .0001$	$p < .0001$	$p < .0001$	$p < .001$

Notes: Different superscript letters (a, b, c, and d) within a given column indicate significant differences at the level of at least  $p < .05$ . Boldface indicates that each of the emotion-specific ads elicited the highest level of the focal emotion. Emotion check items were measured on a seven-point scale.

<sup>11</sup>Oveis, Horberg, and Keltner (2010) previously validated the compassion image.



Table 2  
ADVERTISEMENTS USED FOR INDUCTION OF SPECIFIC POSITIVE EMOTIONS

Love	Pride	Hope	Compassion	Neutral
<p><b>Advertisement</b></p>  <p><b>CAPTURING MOMENTS LIKE THIS</b></p> <p><small>Every time a baby girl holds fast to her father's thumb. Every time a young boy picks flowers for his mom. Every time a mother bakes chocolate chip cookies for her daughter. Every time a gray-haired couple sits elbow-to-elbow at a picnic table sharing smiles and watermelon slices. Every time a furry best friend greets her person at the door. Every time you visit your oldest and dearest friends and reunite in a warm embrace.</small></p> <p><b>A moment like this... reminds you of dear ones and touches your heart.</b></p>	<p><b>Advertisement</b></p>  <p><b>CAPTURING MOMENTS LIKE THIS</b></p> <p><small>Every time an athlete claims first place. Every time an actor gives a performance that brings the house down. Every time a grandmother bakes her secret-recipe apple pie for a contest and it wins the grand prize. Every time a scholar completes her graduate education having achieved the school's highest honors. Every time a runner raises his arms in victory because he crossed the finish line with a personal best. Every time you have beaten out all the other applicants for a prized job.</small></p> <p><b>A moment like this... reminds you of having achieved your very best.</b></p>	<p><b>Advertisement</b></p>  <p><b>CAPTURING MOMENTS LIKE THIS</b></p> <p><small>Every time a little girl dreams she could earn a spot in the ballet company. Every time a couple puts a picture of a house on their apartment refrigerator thinking it may someday be in reach. Every time a little boy sets up a lemonade stand and tries to earn enough money for that awesome bicycle. Every time a student writes a personal essay for her application and then waits and wonders about acceptance to the university her heart is set on. Every time an actor, knowing it is a long-shot, prepares to audition for the role of his lifetime. Every time you have a chance to interview for your dream job, knowing the competition is steep.</small></p> <p><b>A moment like this... reminds you that reaching your goals may be possible.</b></p>	<p><b>Advertisement</b></p>  <p><b>CAPTURING MOMENTS LIKE THIS</b></p> <p><small>Every time a soldier comforts his wounded brother-in-arms. Every time a volunteer in a nursing home reads the newspaper to an elderly person who cannot see. Every time someone sees a homeless person sitting in the rain and stops and gives away her umbrella. Every time friends come together to assist with care-giving during the last months of their neighbor's life. Every time a student notices a new kid in the cafeteria and invites him to sit at his table for lunch. Every time you take the time to help someone who is in need.</small></p> <p><b>A moment like this... reminds you of kind acts toward those most in need.</b></p>	<p><b>Advertisement</b></p>  <p><b>CAPTURING MOMENTS LIKE THIS</b></p> <p><small>Every time a student walks across campus in the way to her regular weekly classes. Every time a commuter reads the newspaper on a daily bus ride to and from work. Every time a businessman crosses through a street intersection on the way to an office downtown. Every time a staff person sits in front of the computer working on a document at her desk. Every time a man shops for his weekly groceries at the supermarket. Every time you walk down the sidewalk on your typical route.</small></p> <p><b>A moment like this... reminds you of the normal situations that make up your days.</b></p>
	<p><b>Body Copy</b></p> <p>Every time an athlete claims first place. Every time an actor gives a performance that brings the house down. Every time a grandmother bakes her secret-recipe apple pie for a contest and it wins the grand prize. Every time a scholar completes her graduate education having achieved the school's highest honors. Every time a runner raises his arms in victory because he crossed the finish line with a personal best. Every time you have beaten out all the other applicants for a prized job.</p>	<p><b>Body Copy</b></p> <p>Every time a little girl dreams she could earn a spot in the ballet company. Every time a couple puts a picture of a house on their apartment refrigerator thinking it may someday be in reach. Every time a little boy sets up a lemonade stand and tries to earn enough money for that awesome bicycle. Every time a student writes a personal essay for her application and then waits and wonders about acceptance to the university her heart is set on. Every time an actor, knowing it is a long-shot, prepares to audition for the role of his lifetime. Every time you have a chance to interview for your dream job, knowing the competition is steep.</p>	<p><b>Body Copy</b></p> <p>Every time a soldier comforts his wounded brother-in-arms. Every time a volunteer in a nursing home reads the newspaper to an elderly person who cannot see. Every time someone sees a homeless person sitting in the rain and stops and gives away her umbrella. Every time friends come together to assist with care-giving during the last months of their neighbor's life. Every time a student notices a new kid in the cafeteria and invites him to sit at his table for lunch. Every time you take the time to help someone who is in need.</p>	<p><b>Body Copy</b></p> <p>Every time a student walks across campus in the way to her regular weekly classes. Every time a commuter reads the newspaper on a daily bus ride to and from work. Every time a businessman crosses through a street intersection on the way to an office downtown. Every time a staff person sits in front of the computer working on a document at her desk. Every time a man shops for his weekly groceries at the supermarket. Every time you walk down the sidewalk on your typical route.</p>
	<p><b>Tagline</b></p> <p>A moment like this... reminds you of having achieved your very best.</p>	<p><b>Tagline</b></p> <p>A moment like this... reminds you of reaching your goals may be possible.</p>	<p><b>Tagline</b></p> <p>A moment like this... reminds you of kind acts toward those most in need.</p>	<p><b>Tagline</b></p> <p>A moment like this... reminds you of the normal situations that make up your days.</p>



revealed that the compassion ad was viewed as less positive ( $M_{\text{love}} = 4.81$ ,  $M_{\text{compassion}} = 3.93$ ;  $F(1, 137) = 11.34$ ,  $p < .001$ ), more negative ( $M_{\text{love}} = 2.07$ ,  $M_{\text{compassion}} = 3.29$ ;  $F(1, 137) = 11.98$ ,  $p < .001$ ), and more emotional ( $M_{\text{love}} = 3.26$ ,  $M_{\text{compassion}} = 4.21$ ,  $F(1, 137) = 8.48$ ,  $p < .004$ ) than the love ad.

### Main Study

**Participants and setup.** For the main study, two hundred six students completed a multipart advertising study for course credit. The first task in the study was affectively neutral and constant across conditions. Its purpose was to neutralize affect and reinforce the cover story. First, all participants completed the same "image and graphics pretest" in which they viewed and rated three neutral images (pens, stapler, and outdoor space; White, Kenrick, and Neuberg 2014) in terms of how they would rate an ad that used this picture. The second task ("magazine advertising") provided the manipulation of specific emotions. The dependent measure was collected in a third consumer decision-making task. In Study 4, participants were randomly assigned to one of the five emotion conditions (emotion: love, hope, pride, compassion, neutral), which were pretested in the aforementioned pilot study.

**Emotion induction.** Each participant viewed one of the five ads described in the pilot study. Importantly, unlike the pilot study they were not asked about their feelings because labeling one's feelings after incidental emotion inductions can reduce the effect of such emotions (Cryder et al. 2008; Schwarz and Clore 1983).

**Domestic versus international environmental fund donation decision.** After completing the magazine advertising task, participants completed a consumer decision task, in which they were asked to make a donation decision "as you really would at this moment." They were told to imagine receiving a \$10 bonus payment and that they could either donate to the following nonprofit organizations helping the environment or keep the \$10 bonus payment. Participants were asked how they chose to allocate the bonus payment and entered amounts (\$0–\$10) for each of the following options: "Environmental Defense Local Fund," "Natural Resource Federation International Fund," and "Keep for Self." We conducted a charities pretest ( $N = 66$ ) before the main study to ensure that both charities were equally preferred. Paired comparisons indicated that participants gave equivalent amounts to both the local ( $M = \$2.58$ ) and international ( $M = \$2.50$ ) environmental charities ( $t(65) = .17$ , n.s.) but kept significantly more for themselves ( $M = \$4.92$ ) than they gave to either the local ( $t(65) = -2.66$ ,  $p < .01$ ) or the international ( $t(65) = -2.79$ ,  $p < .007$ ) groups absent any emotion manipulation.

Our focal prediction ( $H_2$ ) is that love will increase the propensity to give to the international fund, shifting the focus from general tendencies to prefer local giving. To test whether love shifts priority toward more socially distant beneficiaries, we used these allocation amounts to create both a giving index (international – local) and a proportion given to international relief (international/total amount donated) for each participant, which served as the dependent measures. Note that we can only calculate the propor-

tion measure for those who chose to donate something (67 participants chose to keep all the money); the giving index enables us to use data for all the participants, ensuring that our proportion results are not somehow an artifact of shifts in propensity to opt out of giving at all.<sup>13</sup>

**Social connection, emotional response, and background measures.** Participants completed the same social connection measures ( $\alpha = .93$ ) as in Studies 2 and 3. They also completed a short series of questions about the advertisements they had viewed, indicating the extent to which they would rate their emotional response as positive and as negative and the extent to which they felt emotional when viewing the advertisement on seven-point scales (1 = "not at all," and 7 = "very"). Finally, participants completed basic demographic measures (age, gender, and ethnicity).

**Hypothesis tests.** To determine whether the expected difference emerged in terms of whether the funds were allocated to the international versus local fund (i.e., distant vs. close), we ran analyses of variance predicting the proportion given to international relief from emotion condition and the giving index. Consistent with our theorizing, when donations are analyzed as a proportion (international/total amount donated), the overall model is significant ( $F(4, 133) = 2.45$ ,  $p < .05$ ), and those who viewed the love ad ( $M = .58$ ) allocated a larger proportion toward the international group than those in the compassion ( $M = .36$ ;  $F(1, 133) = 8.67$ ,  $p < .004$ ), hope ( $M = .43$ ;  $F(1, 133) = 4.29$ ,  $p < .04$ ), pride ( $M = .45$ ;  $F(1, 133) = 3.62$ ,  $p < .06$ ), or neutral ( $M = .42$ ;  $F(1, 133) = 4.87$ ,  $p < .03$ ) ad groups. In addition, we find a significant effect of emotion on the giving index ( $F(4, 200) = 2.57$ ,  $p < .04$ ). Those who viewed the love ad ( $M = .79$ ) allocated relatively more toward the international group than those in the compassion ( $M = -1.15$ ;  $F(1, 200) = 8.72$ ,  $p < .004$ ), hope ( $M = -.64$ ;  $F(1, 200) = 4.54$ ,  $p < .03$ ), pride ( $M = -.15$ ;  $F(1, 200) = 2.08$ ,  $p < .15$ ), or neutral ( $M = -.75$ ;  $F(1, 200) = 5.34$ ,  $p < .02$ ) ad groups<sup>14</sup> (see the Web Appendix).

We also conducted follow-up analyses on the supplemental measures. As we expected, participants reported experiencing greater social connection with the love ad ( $M_{\text{love}} = 8.45$ ) than the hope ( $M_{\text{hope}} = 7.19$ ;  $F(1, 200) = 8.11$ ,  $p < .005$ ), pride ( $M_{\text{pride}} = 6.44$ ;  $F(1, 200) = 21.94$ ,  $p < .0001$ ), and neutral ( $M_{\text{neutral}} = 5.93$ ;  $F(1, 200) = 32.05$ ,  $p < .0001$ )

<sup>13</sup>We calculated the proportions of those donating at all, donating to the local charity, and donating to the international charity; we found no significant differences across conditions ( $p = .24$ ,  $p = .43$ , and  $p = .18$ , respectively). We also calculated how much money participants donated in total. We found no differences in this total ( $F < 1$ ) across conditions; thus, we do not discuss total donations (and the linearly related amount kept for the self [\$10 – amount donated]) further.

<sup>14</sup>As a robustness check, we also examined amounts allocated to the international and local funds using seemingly unrelated regression, running the SYSLIN procedure in SAS. The two equations were estimated simultaneously, along with the cross-model correlation, using four condition dummy variables (for five emotion conditions). We found that love ( $B = 1.25$ ,  $t(200) = 2.31$ ,  $p < .02$ ) was a significant predictor of amount donated to the international fund, but compassion ( $B = -.66$ ,  $t(200) = -1.26$ ,  $p < .21$ ), hope ( $t < 1$ ), pride ( $t < 1$ ), and a neutral emotional state ( $t < 1$ ) were not. In contrast, compassion ( $B = 1.28$ ,  $t(200) = 2.33$ ,  $p < .02$ ), hope ( $B = 1.05$ ,  $t(200) = 1.88$ ,  $p < .06$ ), pride ( $B = .88$ ,  $t(200) = 1.63$ ,  $p < .10$ ), and a neutral emotion ( $B = 1.55$ ,  $t(200) = 2.78$ ,  $p < .006$ ) were predictors of amount donated to the local fund, but love was not ( $t < 1$ ). The cross-model correlation for the seemingly unrelated regression analysis was .249, with a 95% CI that excluded zero (.1114, .3866).



ads but reported equivalent social connection with the compassion ad ( $M_{\text{compassion}} = 8.23$ ;  $F < 1$ ). The love and compassion ads also elicited emotional responses that were rated as similarly emotional ( $M_{\text{love}} = 3.80$ ,  $M_{\text{compassion}} = 3.63$ ;  $F < 1$ ) and positive ( $M_{\text{love}} = 4.98$ ,  $M_{\text{compassion}} = 4.62$ ;  $F(1, 200) = 2.53$ ,  $p < .11$ ). However, the compassion ad also elicited a greater negative emotional response than love ( $M_{\text{love}} = 2.04$ ,  $M_{\text{compassion}} = 2.81$ ;  $F(1, 200) = 7.37$ ,  $p < .007$ ). Notably, love's effect is not explained by magnitude of positive emotion alone (i.e., love, hope, and pride were rated as equally positive [all  $F$ s  $< 1$ ]).

Holding compassion aside, we tested whether social connection mediated the demonstrated effect. To test mediation of a four-group independent variable (Hayes 2013, p. 196), we constructed three dummy variables, X1, X2, and X3, representing the neutral, hope, and pride conditions, respectively. With four groups, there are three indirect effects: (1) the indirect effect of neutral emotion versus love on the giving index through social connection, (2) the indirect effect of hope versus love on the giving index through social connection, and (3) the indirect effect of pride versus love on the giving index through social connection.<sup>15</sup> We tested for mediation by social connection using PROCESS analyses and requested estimates of the conditional indirect effects at different levels of positivity. PROCESS analyses (Model 14 with 5,000 bootstrapped samples) confirmed evidence of moderated mediation. The effect of love on the giving index was mediated by social connection at moderate and high (but not low) levels of positivity. The indirect effect of neutral versus love, with a 90% bias-corrected bootstrapped confidence interval, was significant at moderate and high levels of positivity (-1 SD:  $B = .0043$ ,  $SE = .3407$ ,  $CI = [-.5807, .5258]$ ; mean:  $B = .5881$ ,  $SE = .4093$ ,  $CI = [.0548, 1.3989]$ ; +1 SD:  $B = 1.1719$ ,  $SE = .7442$ ,  $CI = [.1695, 2.6603]$ ). The indirect effect of hope versus love was also significant at moderate and high (but not low) levels of positivity (-1 SD:  $B = .0015$ ,  $SE = .1288$ ,  $CI = [-.2390, .1834]$ ; mean:  $B = .2032$ ,  $SE = .1568$ ,  $CI = [.0247, .5797]$ ; +1 SD:  $B = .4049$ ,  $SE = .3060$ ,  $CI = [.0521, 1.1502]$ ). The indirect effect of pride versus love was also significant at moderate and high levels of positivity (-1 SD:  $B = .0024$ ,  $SE = .1907$ ,  $CI = [-.3256, .3018]$ ; mean:  $B = .3233$ ,  $SE = .2303$ ,  $CI = [.0302, .7975]$ ; +1 SD:  $B = .6443$ ,  $SE = .4154$ ,  $CI = [.1130, 1.5247]$ ). These results provide evidence that love's effect on the giving index is mediated by social connection at moderate to high (but not low) levels of positivity. Note that not all these comparisons hold with 95% CIs.

### Discussion

Study 4 shows that love (but not hope, pride, compassion, or a neutral emotion) increases priority placed on giving to international charity organizations. Study 4 provides further evidence that love is distinct from hope and pride in terms of social connection. Although both love and compassion are associated with feelings of social connection, only love caused consumers to donate more to distant others. This evi-

dence suggests that love has a unique broadening effect and that broadening through social connection is expected in response to socially connecting positive emotional experiences and not to those accompanied by the co-occurrence of negative feelings.

### GENERAL DISCUSSION

We examine whether and how specific positive emotions can influence to whom consumers give resources. Our results show that, to date, the relationship between positive emotion and prosocial behavior has been overgeneralized. Four studies show that specific positive emotions predict unique patterns of prosocial behavior. Studies 1 and 2 show that love and hope influence prosocial consumption that benefits close and distant others in different ways. Dispositional (Study 1) and incidental (Study 2) love but not hope increases willingness to perform behaviors that benefit distant others (e.g., refugee families). Whether measured or manipulated, love increases behaviors that benefit distant others, but both hope and love similarly affect behaviors that benefit close others. Study 3 shows that specific positive emotions change how people give in response to fundraising appeals—specifically, the amount of money given to different types of beneficiaries. Love increases donations to distant others (i.e., international relief funds) relative to pride, neutral emotion, and hope (Study 3 and replication study). In addition, love increases donation allocations to international organizations relative to hope, pride, compassion, and a neutral emotion (Study 4). This relationship between specific positive emotions and behaviors that benefit distant others is explained in part by feelings of social connection (Studies 2 and 3) but is also qualified by the nature of the emotional experience (Study 4). More specifically, broadening through social connection to help distant others seems to require social connection predicated on positive feelings (vs. co-occurrence of positive and negative feelings).

### Theoretical Contributions

This research has important implications for emotion theory and offers the first empirical demonstration of differential broadening, a unique contribution to the broaden-and-build theory of positive emotion (Fredrickson 1998, 2001; Fredrickson et al. 2008). Previous tests of the broaden-and-build theory have shown that all positive emotions broaden in similar ways by broadening attention, cognitive and motivational scope, and range of thoughts and actions. We find that love, a positive emotion characterized by social connection, leads to prosocial consumption behaviors that benefit distant others as well as donations to international relief funds and organizations, whereas other specific positive emotions do not. This distinction that some positive emotions broaden in a way that others do not is a first in the literature. Why have these effects not been found previously? To date, Fredrickson and colleagues (Frederickson and Branigan 2005; Frederickson et al. 2008; Frederickson et al. 2003) have focused on demonstrating that positive emotions as a group have functionality (i.e., broadening) distinct from the narrowing action tendencies promoted by negative emotions research. They have also focused on showing that

<sup>15</sup>As outlined by Hayes (2013), running PROCESS three times—once with X1 as the IV and X2 and X3 as covariates, once with X2 as the IV and X1 and X3 as the covariates, and once with X3 as the IV and X2 and X3 as the covariates—enables the researcher to recover each indirect effect.



broadening effects are not a function of arousal. Thus, their research does not address the array of positive emotions and more detailed view of broadening we suggest.

Our findings not only provide the first demonstration of differential broadening but also contribute by highlighting an important dimension on which positive emotions differ. Previous research has focused largely on negative emotions and dimensions important to their differentiation (i.e., certainty and control; e.g., Lerner and Keltner 2001). Our research suggests that positive emotions differ along an important dimension related to broadening behaviors and provides a richer understanding of the dimensions central to differentiating positive emotions.

#### *Implications for Prosocial Consumption and Marketing*

Our research also has important implications for prosocial consumption and prosocial behavior more generally by highlighting beneficiary focus as an important dimension of prosocial consumption. Prosocial consumption behaviors differ substantially in terms of the type of person or cause benefited. Our research demonstrates the implications of specific positive emotions for different types of beneficiaries. These findings suggest that marketers and policy makers need to be keenly aware of the type of emotion they are using in their appeals to consumers. In addition, our findings help illuminate why different levels of prosocial consumption behaviors may occur in different contexts (e.g., when appeals contain different types of positive emotional content).

It is not the case that one positive emotion (love) is universally better at motivating all behaviors than others. Rather, the relative effectiveness of love in marketing depends on the type of behavior desired. In a fundraising or social marketing context, a campaign that benefits distant others will be more effective using love rather than hope, pride, or compassion. For close others, the set of positive emotions may be equally effective. Managers and policy makers also may strategically try to increase potential donors' and consumers' sense of social connection to others within the context of a nonprofit, a university, or a brand, particularly when the beneficiary or product is less familiar to them. Our findings underscore the importance of differentiating among a fuller spectrum of specific positive emotions when designing and testing persuasive communications.

#### *Limitations*

Although our article offers evidence of love's impact on prosocial behaviors through feelings of social connection, we do not definitively resolve the cognitive and emotional process that could possibly be producing the results. For example, empathy and other unmeasured constructs may be involved. In addition, our focus on love in companionate relationships may imply that connectedness is a necessary precursor to love (for results testing the reverse mediation, see Study 3). Emotion researchers have long grappled with the classic "chicken or egg" question regarding the relationship between cognition and emotion, with some theorists contending that affect precedes cognition (e.g., Zajonc 1980) and others contending that cognition precedes affect (e.g., Bower 1981). Recent work has suggested that affect

and cognition are highly interdependent (Storbeck and Clore 2008). Further research is needed to shed light on such issues.

In addition, our attempts to measure and manipulate emotions relied on self-report data, which is a limitation of this research. To manipulate specific emotions, we employed a written emotion induction procedure requiring participants to write about autobiographical events (Studies 2 and 3). This procedure is the most common emotion manipulation procedure in the marketing literature (we surveyed emotion studies appearing in *Journal of Marketing Research* and *Journal of Consumer Research* between 2003 and 2013 and found that 60.4% used this method). Because this method relies on written statements, some may question whether it produced felt emotion or simply activated or semantically primed emotion-related words. We believe that our data do not support an account that results solely from priming. First, the detailed LIWC analyses of participants' stories do not support a mere semantic priming account. Specifically, the frequency of social process-related words in the stories did not mediate the relationship between love and behaviors benefiting distant others (Study 2 and 3), and the other word types analyzed either did not differ across the different positive emotions examined or did not mediate the results. Second, the dispositional emotion results in Study 1 are difficult to explain as being due to simple priming based on presence of an emotion word (or words) in the writing task instructions and responses, given that in the fully within-subject design all participants read all of the same emotion words. Third, the advertisement results in Study 4 are demonstrated without the use of the actual emotion words ever appearing in the advertisements. Finally, our detailed manipulation check data suggest that participants report experiencing these emotions.

#### *Further Research*

In this article, we endeavored to shed new light on a more diverse set of specific positive emotions often used by marketers. Our efforts offer multiple avenues for further research, as we discuss next.

*Social connection.* Our approach offers a framework for making additional predictions linking specific positive emotions to additional forms of broadening on the basis of discrete functions and different behaviors. The current studies focus on demonstrating that love broadens in a particular way (i.e., social connection accompanied by positive feelings affects behaviors that benefit distant others). Beyond the prosocial behavior context, love and social connection may have important implications for financial decision making and branding. More specifically, further research could explore how social connection influences intergenerational choices and financial decision making for those who are temporally distant (e.g., people saving money for grandchildren who are not yet born, alumni giving to benefit future students and university initiatives). Moreover, social connection may have important implications for consumer-brand relationships, brand loyalty, and consumer willingness to switch products or brands (e.g., acceptance of brand extensions).



It seems that there may be circumstances in which compassion, as a socially connecting emotion, could increase behaviors toward distant others, even if not through broadening. In circumstances in which the suffering of distant others is particularly relatable or apparent (e.g., vivid images of sick or injured children, families affected by a hurricane or tsunami) and a person feels particularly able to alleviate that suffering, compassion may also lead to behaviors benefiting those distant others. This thinking would be consistent with prior work on identifiable victims (Small, Loewenstein, and Slovic 2007) as well as Small and Verrochi's (2009) findings that portrayals of specific, sad-faced victims increase prosocial behavior through compassion and sympathy. However, in situations or domains in which circumstances are less dire or the need is more chronic (e.g., education, the environment, animal welfare, preventative medicine and aid interventions), such as in our studies, love may be more beneficial. In addition, fundraising or donation requests for organizations or causes benefiting distant others (who may never be met or seen and whose level of suffering may not be observable) may be better facilitated by love.

*Other forms of broadening.* Another important area for further research involves investigating whether other specific emotions (e.g., hope) may affect behavior through a different form of broadening. For example, hope may have an effect on prosocial behavior and other consumer behaviors through a different broadening tendency. Prior work has suggested that high-hope people demonstrate better problem-solving abilities (Chang 1998) and that hope influences perception of goal obstacles as well as the expenditure and sustaining of effort (Ellsworth and Smith 1988; Smith and Ellsworth 1985; Snyder et al. 1991). Thus, hope may broaden by enhancing consumers' willingness to expend energy to solve problems. This tendency would have important implications for consumption behaviors that vary in the amount of effort and persistence required to complete them. For example, many prosocial behaviors (e.g., donating spare change, purchasing a candy bar for a cause) involve small token efforts, whereas others (e.g., recycling, conserving resources, volunteering services) require problem recognition and considerable amounts of effort. Broadened problem solving may enhance willingness to engage in an array of effortful prosocial behaviors (e.g., environmental actions to reduce one's carbon footprint). Thus, hope may influence behavior through a different broadening mechanism distinct from the social connection that characterizes love.

Although consumer hope is an important topic for further research, it may have complex effects. For example, other researchers have suggested that threats to hope lead to motivated reasoning about products (MacInnis and De Mello 2005). Additional research is needed to understand when hope will be an asset versus a detriment to consumer decision making and prosocial consumption behavior.

Although all positive emotional themes may make consumers feel good, all positive emotions will not motivate the same types of consumption behavior or even the same prosocial consumption behaviors. By understanding the distinct broadening functions served by specific positive emotions, marketers can do more than make consumers feel good: they can help consumers and organizations do better for themselves and for others.

## REFERENCES

- Agrawal, Nidhi, Geeta Menon, and Jennifer L. Aaker (2007), "Getting Emotional About Health," *Journal of Marketing Research*, 44 (February), 100–113.
- Bartlett, Monica Y. and David DeSteno (2006), "Gratitude and Prosocial Behavior: Helping When It Costs You," *Psychological Science*, 17 (4), 319–25.
- Batson, Daniel C., Nadia Ahmad, Adam A. Powell, and Eric L. Stocks (2008), "Prosocial Motivation," in *Handbook of Motivation Science*, James Y. Shah and Wendi L. Gardner, eds. New York: Guilford Press, 135–49.
- Belk, Russell W. and Gregory S. Coon (1993), "Gift Giving as Agapic Love: An Alternative to the Exchange Paradigm Based on Dating Experiences," *Journal of Consumer Research*, 20 (3), 393–417.
- Bower, Gordon H. (1981), "Mood and Memory," *American Psychologist*, 36 (2), 129–48.
- Burke, Marian C. and Julie A. Edell (1989), "The Impact of Feelings on Ad-Based Affect and Cognition," *Journal of Marketing Research*, 26 (February), 69–83.
- Cavanaugh, Lisa A., Keisha M. Cutright, Mary Frances Luce, and James R. Bettman (2011), "Hope, Pride, and Processing During Optimal and Nonoptimal Times of Day," *Emotion*, 11 (1), 38–46.
- Chang, Edward C. (1998), "Hope, Problem-Solving Ability, and Coping in a College Student Population: Some Implications for Theory and Practice," *Journal of Clinical Psychology*, 54 (7), 953–62.
- Chang, Hannah H. and Michel Tuan Pham (2013), "Affect as Decision-Making System of the Present," *Journal of Consumer Research*, 40 (1), 42–63.
- Collett, Jessica L. and Christopher A. Morrissey (2007), "The Social Psychology of Generosity: The State of Current Interdisciplinary Research," research paper, The Science of Generosity, (October), (accessed May 15, 2015), [available at [https://generosityresearch.nd.edu/assets/17634/social\\_psychology\\_of\\_generosity\\_final.pdf](https://generosityresearch.nd.edu/assets/17634/social_psychology_of_generosity_final.pdf)].
- Cryder, Cynthia E., Jennifer S. Lerner, James J. Gross, and Ronald E. Dahl (2008), "Misery Is Not Miserly: Sad and Self-Focused Individuals Spend More," *Psychological Science*, 19 (6), 525–30.
- Dunn, Jennifer R. and Maurice E. Schweitzer (2005), "Feeling and Believing: The Influence of Emotion on Trust," *Journal of Personality and Social Psychology*, 88 (5), 736–48.
- Ellsworth, Phoebe C. and Craig A. Smith (1988), "Shades of Joy: Patterns of Appraisal Differentiating Pleasant Emotions," *Cognition & Emotion*, 2 (4), 301–331.
- Fitness, Julie and Garth J.O. Fletcher (1993), "Love, Hate, Anger, and Jealousy in Close Relationships: A Prototype and Cognitive Appraisal Analysis," *Journal of Personality and Social Psychology*, 65 (5), 942–58.
- Fredrickson, Barbara L. (1998), "What Good Are Positive Emotions?" *Review of General Psychology*, 2 (3), 300–319.
- (2001), "The Role of Positive Emotions in Positive Psychology: The Broaden-and-Build Theory of Positive Emotions," *American Psychologist*, 56 (3), 218–26.
- (2009), *Positivity*. New York: Crown Publishers.
- and Christine Branigan (2005), "Positive Emotions Broaden the Scope of Attention and Thought-Action Repertoires," *Cognition & Emotion*, 19 (3), 313–32.
- , Michael A. Cohn, Kimberley A. Coffey, Jolynn Pek, and Sandra M. Finkel (2008), "Open Hearts Build Lives: Positive Emotions, Induced Through Loving-Kindness Meditation, Build Consequential Personal Resources," *Journal of Personality and Social Psychology*, 95 (5), 1045–62.



- , Michele M. Tugade, Christian E. Waugh, and Gregory R. Larkin (2003), "What Good Are Positive Emotions in Crisis? A Prospective Study of Resilience and Emotions Following the Terrorist Attacks on the United States on September 11th, 2001," *Journal of Personality and Social Psychology*, 84 (2), 365–76.
- Gable, Philip A. and Eddie Harmon-Jones (2008), "Approach-Motivated Positive Affect Reduces Breadth of Attention," *Psychological Science*, 19 (5), 476–82.
- Giving USA (2013), "Giving in U.S. Grows, Still Lags 2007 Peak," Giving USA Annual Report, (accessed June 17, 2013), [available at <http://www.givingusareports.org/news-and-events/news.aspx?NewsTypeId=3&NewsId=186>].
- Goetz, Jennifer L., Dacher Keltner, and Emiliana Simon-Thomas (2010), "Compassion: An Evolutionary Analysis and Empirical Review," *Psychological Bulletin*, 136 (3), 351–74.
- Gonzaga, Gian C., Rebecca A. Turner, Dacher Keltner, Belinda Campos, and Margaret Altemus (2006), "Romantic Love and Sexual Desire in Close Relationships," *Emotion*, 6 (2), 163–79.
- Griskevicius, Vladas, Noah J. Goldstein, Chad R. Mortenson, Jill M. Sundie, Robert B. Cialdini, and Douglas T. Kenrick (2009), "Fear and Loving in Las Vegas: Evolution, Emotion, and Persuasion," *Journal of Marketing Research*, 46 (June), 384–95.
- , Michelle N. Shiota, and Stephen M. Nowlis (2010), "The Many Shades of Rose-Colored Glasses: An Evolutionary Approach to the Influence of Different Positive Emotions," *Journal of Consumer Research*, 37 (2), 238–50.
- Hayes, Andrew F. (2013), *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. New York: Guilford Press.
- Herr, Paul M., Christine M. Page, Bruce E. Pfeiffer, and Derick F. Davis (2012), "Affective Influences on Evaluative Processing," *Journal of Consumer Research*, 38 (5), 833–45.
- Hutcherson, Cendri A., Emma M. Seppala, and James J. Gross (2008), "Loving-Kindness Meditation Increases Social Connectedness," *Emotion*, 8 (5), 720–24.
- Isen, Alice M. (2001), "An Influence of Positive Affect on Decision Making in Complex Situations: Theoretical Issues with Practical Implications," *Journal of Consumer Psychology*, 11 (2), 75–85.
- Kim, Hakkyun, Kiwan Park, and Norbert Schwarz (2010), "Will This Trip Really Be Exciting? The Role of Incidental Emotions in Product Evaluation," *Journal of Consumer Research*, 6 (6), 983–91.
- Kitayama, Shinobu, Batja Mesquita, and Mayumi Karasawa (2006), "Cultural Affordances and Emotional Experience: Socially Engaging and Disengaging Emotions in Japan and the United States," *Journal of Personality and Social Psychology*, 91 (5), 890–903.
- Labroo, Aparna A. and Derek D. Rucker (2010), "The Orientation-Matching Hypothesis: An Emotion-Specificity Approach to Affect Regulation," *Journal of Marketing Research*, 47 (October), 955–66.
- Lazarus, Richard S. (1991), "Cognition and Motivation in Emotion," *American Psychologist*, 46 (4), 352–67.
- (2006), "Emotions and Interpersonal Relationships: Toward a Person-Centered Conceptualization of Emotions and Coping," *Journal of Personality*, 74 (1), 9–46.
- Lerner, Jennifer S. and Dacher Keltner (2001), "Fear, Anger, and Risk," *Journal of Personality and Social Psychology*, 81 (1), 146–59.
- , Deborah A. Small, and George Loewenstein (2004), "Heart Strings and Purse Strings: Carryover Effects of Emotions on Economic Decisions," *Psychological Science*, 15 (5), 337–41.
- MacInnis, Deborah J. and Gustavo E. de Mello (2005), "The Concept of Hope and Its Relevance to Product Evaluation and Choice," *Journal of Marketing*, 69 (January), 1–14.
- Oveis, Christopher, Elizabeth J. Horberg, and Dacher Keltner (2010), "Compassion, Pride, and Social Intuitions of Self–Other Similarity," *Journal of Personality and Social Psychology*, 98 (4), 618–30.
- Penner, Louis A. and Marcia A. Finkelstein (1998), "Dispositional and Structural Determinants of Volunteerism," *Journal of Personality and Social Psychology*, 74 (2), 525–37.
- Pham, Michel Tuan, Iris W. Hung, and Gerald J. Gorn (2011), "Relaxation Increases Monetary Valuations," *Journal of Marketing Research*, 48 (October), 814–26.
- Piliavin, Jane A. and Hong-Wen Charng (1990), "Altruism: A Review of Recent Theory and Research," *Annual Review of Sociology*, 16, 27–65.
- Raghunathan, Rajagopal and Michel Tuan Pham (1999), "All Negative Moods Are Not Equal: Motivational Influences of Anxiety and Sadness on Decision Making," *Organizational Behavior and Human Decision Processes*, 79 (1), 56–77.
- Reed, Americus, II, Karl Aquino, and Eric Levy (2007), "Moral Identity and Judgments of Charitable Behaviors," *Journal of Marketing*, 71 (January), 178–93.
- Reichard, Rebecca J., James B. Avey, Shane Lopez, and Maren Dollwet (2013), "Having the Will and Finding the Way: A Review and Meta-Analysis of Hope at Work," *Journal of Positive Psychology*, 8 (4), 292–304.
- Roseman, Ira J., Ann Aliki Antoniou, and Paul E. Jose (1996), "Appraisal Determinants of Emotions: Constructing a More Accurate and Comprehensive Theory," *Cognition and Emotion*, 10 (3), 241–77.
- Rottenberg, Jonathan, Rebecca D. Ray, and James J. Gross (2007), "Emotion Elicitation Using Films" in *The Handbook of Emotion Elicitation and Assessment*, James A. Coan and John J. B. Allen, eds. London: Oxford University Press, 9–28.
- Sauter, Disa (2010), "More Than Happy: The Need for Disentangling Positive Emotions," *Current Directions in Psychological Science*, 19 (1), 36–40.
- Schwarz, Norbert and Gerald L. Clore (1983), "Mood, Misattribution, and Judgments of Well-Being: Informative and Directive Functions of Affective States," *Journal of Personality and Social Psychology*, 45 (3), 513–23.
- Shaver, Phillip, Judith Schwartz, Donald Kirson, and Cary O'Connor (1987), "Emotion Knowledge: Further Exploration of a Prototype Approach," *Journal of Personality and Social Psychology*, 52 (6), 1061–86.
- Shiota, Michelle N. (2004), "A Discrete Emotion Approach to Dispositional Positive Affect," doctoral dissertation, University of California, Berkeley.
- , Dacher Keltner, and Oliver P. John (2006), "Positive Emotion Dispositions Differentially Associated with Big Five Personality and Attachment Style," *Journal of Positive Psychology*, 1 (2), 61–71.
- Small, Deborah A., George Loewenstein, and Paul Slovic (2007), "Sympathy and Callousness: The Impact of Deliberative Thought on Donations to Identifiable and Statistical Victims," *Organizational Behavior and Human Decision Processes*, 102 (2), 143–53.
- and Nicole M. Verrochi (2009), "The Face of Need: Facial Emotion Expression on Charity Advertisements," *Journal of Marketing Research*, 46 (December), 777–87.
- Smith, Craig A. and Phoebe C. Ellsworth (1985), "Patterns of Cognitive Appraisal in Emotion," *Journal of Personality and Social Psychology*, 48 (4), 813–38.
- Snyder, C.R., Cheri Harris, John R. Anderson, and Sharon A. Holleran (1991), "The Will and the Ways: Development and Validation of an Individual-Differences Measure of Hope," *Journal of Personality and Social Psychology*, 60 (4), 570–85.
- Sternberg, Robert (1986), "A Triangular Theory of Love," *Psychological Review*, 93 (2), 119–35.



- Storbeck, Justin and Gerald L. Clore (2007), "On the Interdependence of Cognition and Emotion," *Cognition and Emotion*, 21 (6), 1212–37.
- Strahilevitz, Michal and John G. Myers (1998), "Donations to Charity as Purchase Incentives: How Well They Work May Depend on What You Are Trying to Sell," *Journal of Consumer Research*, 24 (4), 434–46.
- Tracy, Jessica L. and Richard W. Robins (2007), "Emerging Insights into the Nature and Function of Pride," *Current Directions in Psychological Science*, 16 (3), 147–50.
- United Nations (2011), "Human Development Reports," United Nations Development Programme, (accessed May 15, 2015), [available at <http://hdr.undp.org/en/media>].
- Waugh, Christian E. and Barbara L. Fredrickson (2006), "Nice to Know You: Positive Emotions, Self–Other Overlap, and Complex Understanding in the Formation of New Relationships," *Journal of Positive Psychology*, 1 (2), 93–106.
- White, Andrew Edward, Douglas T. Kenrick, and Steven L. Neuberg (2014), "Beauty at the Ballot Box: Disease Threats Increase Preferences for Physically Attractive Leaders," *Psychological Science*, 24 (12), 2429–36.
- Winterich, Karen, Vikas Mittal, and William T. Ross Jr. (2009), "Donation Behavior Toward In-Groups and Out-Groups: The Role of Gender and Moral Identity," *Journal of Consumer Research*, 36 (2), 199–214.
- Zajonc, Robert B. (1980), "Feeling and Thinking: Preferences Need No Inferences," *American Psychologist*, 35 (2), 151–75.



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