

November 10, 2014

ESMT Working Paper

TWO BIRDS, ONE STONE?

POSITIVE MOOD MAKES PRODUCTS SEEM LESS USEFUL FOR MULTIPLE-GOAL PURSUIT

ANASTASIYA POCHEPTSOVA, R. H. SMITH SCHOOL OF BUSINESS, UNIVERSITY OF MARYLAND FRANCINE ESPINOZA PETERSEN, ESMT JORDAN ETKIN, FUQUA SCHOOL OF BUSINESS, DUKE UNIVERSITY

ISSN 1866-3494

Abstract

Two birds, one stone? Positive mood makes products seem less useful for multiple-goal pursuit⁺

Author(s):* Anastasiya Pocheptsova, R. H. Smith School of Business, University of Maryland Francine Espinoza Petersen, ESMT Jordan Etkin, Fuqua School of Business, Duke University

Negotiating the pursuit of multiple goals often requires making difficult trade-offs between goals. In these situations, consumers can benefit from using products that help them pursue several goals at the same time. But do consumers always prefer these multipurpose products? We propose that consumers' incidental mood state alters perceptions of products in a multiple-goals context. Four studies demonstrate that being in a positive mood amplifies perceptions of differences between multiple conflicting goals. As a consequence, consumers are less likely to evaluate multipurpose products as being able to serve multiple distinct goals simultaneously. We conclude by discussing implications of these findings for marketers of multipurpose products.

Keywords: Goals, product evaluation, positive mood

 ^{*} Authors have contributed equally and are listed in reverse alphabetical order. Contact: Francine Petersen, ESMT, Schlossplatz 1, 10178 Berlin, Phone: +49 30 21231-1526, francine.petersen@esmt.org.

⁺ The authors thank Catalina Kopetz, Rebecca Ratner, Associate Editor and three anonymous reviewers for their insightful and constructive feedback on our manuscript.

Copyright 2014 by ESMT European School of Management and Technology, Berlin, Germany, www.esmt.org.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, used in a spreadsheet, or transmitted in any form or by any means - electronic, mechanical, photocopying, recording, or otherwise - without the permission of ESMT.

The marketplace offers many multipurpose products that can help consumers pursue multiple goals at the same time. A smartphone, for instance, can be used for work and to connect with the family. An exercise video is a way to stay healthy and save money. Frozen yogurt helps keep off the pounds and satisfies a sweet tooth. But do consumers always prefer these multipurpose means to goal pursuit? We propose that consumers' moods affect evaluation of multipurpose products.

Positive mood and multiple-goal pursuit

When consumers pursue a single goal, being in a positive mood has clear benefits. People are more likely to pursue goals associated with positive affect (Custers & Aarts, 2005). Being in a positive mood increases the likelihood of goal adoption and goal-congruent actions (Fishbach & Labroo, 2007), especially for long-term goals (Labroo & Patrick, 2009). While pursuing goals in a positive mood, people are more likely to seek feedback to improve their goal pursuit (Gervey, Igou, & Trope, 2005).

Does positive mood have similar beneficial effects when consumers are motivated by multiple goals instead of a single goal? For example, one can simultaneously strive to do well at work, lose weight, and spend time with family. Negotiating the pursuit of multiple distinct goals can be difficult, as consumers have to decide which goals to pursue and which to temporarily forsake (Chun et al., 2011; Fishbach & Ferguson, 2007; Kruglanski et al., 2002). Thus, a key feature of multiple-goal pursuit is the need to make trade-offs between goals, which is an aversive process (Emmons, King, & Sheldon 1993). One can avoid having to make such trade-offs by using multipurpose means: products or services that aid pursuit of several goals at the same time (Kruglanski et al., 2012; Kopetz et al., 2011). However, as we argue next, consumers in a positive mood may be less likely to use such multipurpose means.

Prior research demonstrates that the presence of decision conflict and the need to make trade-offs between multiple options generally increases consumers' focus on unique, or different, features of those options (Brenner, Rottenstreich, & Sood, 1999; Dhar & Sherman, 1996; Gati & Tversky, 1984; Gilbert, Giesler, & Morris, 1995; Medin, Goldstone, & Gentner, 1993; Tversky & Simonson, 1993). If inter-goal conflict similarly leads consumers to consider trade-offs between their multiple goals, consumers should be more likely to focus on differences between goals when choosing which of the multiple goals to pursue.

We propose that a positive mood should enhance the focus on inter-goal trade-offs and increase attention on differences between goals. A positive mood bestows value on thoughts and actions that happen to be accessible at the moment (Clore & Huntsinger, 2007, 2009; Huntsinger, 2012; Hunsinger, Isbell, & Clore, 2012). By doing so, positive mood increases the focus on the most salient information at the time of judgment. Several studies provide converging evidence for this enhancing effect of positive mood. Mather and Sutherland (2011) demonstrate that emotional arousal biases attention toward more visually conspicuous stimuli at the moment. Hunsinger et al. (2012) show that when participants in a positive mood are focused on their internal state (vs. outside environment), they demonstrate a more local (vs. global) focus in their judgments. Murray et al. (1990) further find that when differences (vs. similarities) were the salient focus of the items-evaluation task, participants in a positive mood found more differences (vs. similarities) between items than those in a neutral mood.

Building on this research, we expect that being in a positive mood will enhance the salient focus on trade-offs between multiple conflicting goals, and lead consumers to see these goals as more dissimilar from each other. However, when goals do not conflict (e.g., when goals are overlapping because they serve the same higher purpose) and there is no need to make inter-goal trade-offs, we do not expect this effect to emerge.

The fact that a positive mood makes conflicting goals seem more different from each has negative consequences for evaluation of multipurpose products. Two lines of research provide support for this proposition. First, Köpetz et al. (2011) show that more similar (vs. distinct) goals are more likely to share common means to goal attainment. For example, for the goals of being healthy and getting in shape, participants identified more common means than for more distinct goals, such as the goals of being healthy and doing well at work. Therefore, we expect that consumers in a positive mood, who see their goals as more different from each other, will be less likely to identify multipurpose means for their conflicting goals.

Second, several papers argue that multipurpose means are less effective for goal pursuit (compared to means that serve only one goal), because an addition of other goals to a single means decreases the strength of association between each goal and the means (Kruglanski et al., 2012; Zhang, Fishbach, & Kruglanski, 2007). For example, Simonson, Nowlis, & Simonson (1993) show that preference for a product decreased when participants learned that other consumers were using it for another purpose. Zhang et al. (2007) found that when participants were told (vs. not) that aerobic exercise was instrumental to the goal of maintaining healthy bones, in addition to helping avoid heart disease, they judged exercise as less instrumental in preventing heart disease. Critically, Zhang et al. (2007; Study 3) demonstrate that perceived goal distinctiveness moderates the dilution effect: when participants were asked to deliberate on whether the goals were different from (vs. similar to) each other, they perceived multipurpose means to be less (vs. more) effective for goal pursuit. Based on this research, we propose that by increasing the focus on inter-goal trade-offs and differences between conflicting goals, a positive mood will also decrease perceptions of the instrumentality of multipurpose products. Returning back to our opening example, we predict that when consumers are in a positive mood, they will be less likely to identify and evaluate a smartphone as useful both for the goal of being successful at work and for the goal of spending time with family. This negative effect on evaluation of multipurpose means occurs because consumers in a positive (vs. neutral) mood see goals of being successful at work and spending time with family as more distinct from each other. In what follows, we demonstrate that (a) pursuit of multiple conflicting goals increases the focus on differences between the goals (Study 1), (b) being in a positive mood enhances this focus (Studies 1-3), and (c) increased perception of inter-goal differences lowers evaluation of usefulness of products for the pursuit of multiple conflicting goals (Studies 2-4).

Study 1

Study 1 tests whether a focus on inter-goal differences is salient during pursuit of multiple conflicting goals, and provides initial evidence that incidental positive mood enhances this focus and thereby decreases evaluation of multipurpose means.

Method

Participants and design. Members of a national online panel (N = 116) participated in this study in exchange for a small payment. Participants were randomly assigned to a condition in a 2 (mood: positive, negative) X 3 (focus: similarities, differences, no focus control) between-subjects design and were asked to complete two ostensibly unrelated tasks.

Procedure. In the first task, we manipulated incidental mood using a word-priming task adapted from Pyone and Isen (2011). In the positive-mood condition, we presented participants with 10 words that evoked positive emotions (e.g., laughter, fun). In the negative-mood condition, we presented participants with 10 words that evoked negative emotions

(e.g., loss, war). The words appeared on separate pages, and participants were asked to write the first word that came to mind in response to each. A pre-test using self-reported positive and negative feelings on a series of nine 5-point scales (e.g., "I had unpleasant [pleasant] feelings after reading the words," "The words were depressing [upbeat];" α = .96) confirmed that positive mood was manipulated as intended. Participants reported experiencing more positive feelings in the positive- versus negative-mood condition ($M_{\text{positive}} = 3.88$, $M_{\text{negative}} =$ 2.78; F(1, 74) = 28.24, p < .001). Note that to avoid drawing participants' attention to their moods, we opted for a pre-test in lieu of a manipulation check in all of our studies (Schwarz & Clore, 1983).

In the second task, we activated three distinct goals following a procedure adapted from Fishbach and Labroo (2007). We told participants we were interested in learning about different activities, and presented them with a list of nine activities, three related to each of the following goals: a performance goal (e.g., "I want to achieve success"), a hedonic goal (e.g., "I want to relax and enjoy life"), and a self-improvement goal (e.g., "I want to be a better person"). Participants endorsed these goal-related statements on a series of 7-point scales (-3 = *Strongly Disagree*, 3 = *Strongly Agree*).

Following the goal-activation task, we asked participants to elaborate on the relationships between their performance, hedonic, and self-improvement goals. Specifically, following the Murray et al. (1990) manipulation, in the differences-focus condition, we directed participants to focus on how their goals were different; in the similarities-focus condition, we directed participants to focus on how their goals were similar. By contrast, in the control condition, we did not provide participants with any guidance as to how they should think about their goals. All participants wrote for a few minutes (no time limit imposed) about their goals, after which we measured their perceptions of differences between

their goals on a 7-point scale ("How different are these three goals from one another?" 1 = *Not at all different*, 7 = *Very different*).

After completing a short filler task, participants were asked to list up to 15 means (products, behaviors, etc.) they could use to pursue the three goals they listed earlier. We measured their perceptions of usefulness of these means on three 7-point scales: "To what extent will the means you have listed help you achieve more than one goal?" "To what extent do the means you have listed help you to pursue multiple goals at the same time?" and "How useful will the means you have listed be in helping you to pursue multiple goals at the same time?" (1 = Not at all, 7 = Very much). We combined participants' responses ($\alpha = .95$) to form a composite measure of means evaluations.

Results and discussion

Perceived differences. A 2 X 3 ANOVA on perceived differences between goals revealed the predicted interaction (F(1, 111) = 10.92, p < .001). In the differences-focus condition, positive mood increased perceived differences between goals ($M_{\text{positive}} = 4.85$, $M_{\text{negative}} = 3.75$; F(1, 111) = 8.23, p < .01; d = .81), and a similar (marginal) effect emerged in the control condition ($M_{\text{positive}} = 3.71$, $M_{\text{negative}} = 3.00$; F(1, 111) = 3.55, p = .06; d = .60). This effect reversed in the similarities-focus condition ($M_{\text{positive}} = 2.90$, $M_{\text{negative}} = 4.27$; F(1, 111) =11.03, p = .001; d = 1.32).

Means evaluations. A 2 X 3 ANOVA on the means-usefulness index revealed the predicted interaction (F(1, 110) = 6.36, p < .01). In the differences-focus condition, positive mood made participants see their self-generated means as less useful for multiple-goal pursuit ($M_{\text{positive}} = 4.97$, $M_{\text{negative}} = 5.73$; F(1, 110) = 4.28, p < .05; d = .61). Likewise, positive mood made means seem less useful for multiple-goal pursuit in the control condition ($M_{\text{positive}} = 4.98$, $M_{\text{negative}} = 6.00$; F(1, 110) = 7.70, p < .01; d = .94). This effect reversed, however, in the

similarities-focus condition ($M_{\text{positive}} = 5.62$, $M_{\text{negative}} = 4.82$; F(1, 110) = 3.94, p < .05; d = .68).

Mediation analysis. We used biased-corrected bootstrapping (n=5000) to test whether perceived differences between goals affected the evaluations of multipurpose means (model 8; Hayes, 2013). Supporting our theory, the overall indirect effect for the interaction was significant (ab = .29, 95% CI: .09 to .60). The indirect effect was negative and significant in the (combined-) differences-focus and control conditions (ab = -.11, 95% CI: -.28 to -.03), but positive and significant in the similarities-focus condition (ab = .18, 95% CI: .06 to .37). This finding confirms that enhanced focus on differences (vs. similarities) between goals while in a positive affects evaluation of multipurpose means.

Study 1 demonstrates that being in a positive mood while pursuing multiple distinct goals enhances perceptions of inter-goal differences, both under conditions in which participants were explicitly directed to focus on differences between goals and without any instructions. Next, we replicate this finding while addressing two potential concerns with the design of Study 1. First, we reverse the order of the goal-activation and mood-induction tasks to avoid the possibility that being in a positive mood affects the types of goals participants generate. Second, we include a neutral-mood condition to provide definite evidence that positive mood (and not negative mood) is driving observed effects.

Members of a national online panel (N = 94) participated in this study in exchange for a small payment. We randomly assigned participants to a positive-, negative-, or neutralmood condition and asked them to complete several ostensibly unrelated tasks. In the first task, we activated the same goals as in Study 1 by asking participants to simply indicate whether they had goals in each of the three goal categories (yes-no). In the second task, we manipulated participants' mood using the same manipulation as in Study 1, with an addition of a neutral condition using 10 neutral words (e.g., hat, chair). A pre-test confirmed that the negative-mood manipulation elicited fewer positive feelings than the neutral-mood manipulation ($M_{negative} = 2.78 \text{ vs. } M_{neutral} = 3.43$, F(1, 74) = 13.52, p < .001) and that participants reported experiencing more positive feelings in the positive- versus neutral-mood condition ($M_{positive} = 3.88 \text{ vs. } M_{neutral} = 3.43$, F(1, 74) = 10.69, p < .01). Following the mood manipulation, we asked participants to report their perceptions of differences between the goals they reported having: "How different are these three goals from one another?" "How similar are these three goals to one another?" on a 7-point scale (1 = Not at all, 7 = Verymuch). We combined these measures (similarity question reverse-scored; r = .85) to form an index of perceived differences.

A one-way ANOVA on the perceived-differences index revealed a significant effect of mood (F(2, 91) = 4.17, p < .05). Participants in a positive mood perceived their goals as more different (M = 4.63) than participants in a negative mood (M = 3.59; F(1, 91) = 8.11, p< .01; d = .51) and in a neutral mood (M = 3.90; F(1, 91) = 4.03, p < .05; d = .73). Perceptions of inter-goal differences did not differ between negative and neutral mood ($M_{negative} = 3.59, M_{neutral} = 3.90; F < 1$). Together with the results of Study 1, this finding provides converging evidence that activation of distinct goals increases focus on inter-goal differences and that being in a positive (vs. neutral or negative) mood enhances this focus. As a result, participants in a positive mood see their multiple conflicting goals as more distinct from one another.

Our next three studies test the effect of the enhanced perceptions of inter-goal differences under positive mood on perceptions of usefulness of multipurpose means. In Study 2, we asked all participants to consider two specific goals (career and family), and then independently manipulated perceived conflict between these goals. We expected that when goal conflict is high and a focus on inter-goal differences is present, participants in a positive

mood will see goals as more distinct and will be less likely to identify multipurpose means for goal pursuit. These effects should not emerge, however, when goal conflict is low.

Study 2

Method

Participants and design. Members of a national online panel (N = 203) participated in this study in exchange for a small payment. Participants were randomly assigned to a condition in a 2 (mood: positive, neutral) X 2 (goal conflict: high, low) between-subjects design and were asked to complete several ostensibly unrelated tasks.

Procedure. In the first task, we manipulated incidental mood using the same wordpriming task as in Study 1. In the second task, participants read a scenario about two commonly held conflicting goals. Participants were asked to imagine a recently married couple that wanted to invest in their careers while also starting a family. In the high-conflict condition, the couple had found jobs in different cities. In the low-conflict condition, the couple had found jobs in the same city.

Next, participants reported how different the couple's goals seemed (1 = Different *from each other;* 7 = Similar to each other, reverse-coded). Then we measured perceptions of multipurpose means for goal pursuit. Participants read: "There are several ways for this couple to pursue both of their goals at the same time. For example, one way is to work from home one day a week." We asked participants whether they thought working from home once a week would facilitate the pursuit of the goals of doing well at work and starting a family at the same time (1 = Not at all, 7 = Very much), as well as whether many ways (i.e., means) were available to pursue both goals more generally (1 = Few, 7 = Many; r = .44, p < .001).

A manipulation check ("How conflicting are goals related to career and family? 1 = *Not at all conflicting*; 7 = *Very conflicting*) indicated that the goals seemed more conflicting in the high- versus low-conflict condition as intended (M_{high} = 4.56, M_{low} = 2.58, F(1, 164) = 54.30, p < .001).

Perceived differences. A 2 (mood) X 2 (goal conflict) ANOVA on perceived differences between goals revealed a main effect of goal conflict (F(1, 194) = 11.55, p <.001), qualified by the predicted interaction (F(1, 194) = 5.04, p < .03; Fig. 1). As expected, when goal conflict seemed high, a positive mood led participants to see the focal goals as more different from each other ($M_{\text{positive}} = 4.07$, $M_{\text{neutral}} = 3.25$; F(1, 194) = 4.92, p < .03; d =.46). No comparable effect emerged when goal conflict seemed low ($M_{\text{positive}} = 2.67$, $M_{\text{neutral}} =$ 2.96; F < 1).

Means evaluations. A 2 (mood) X 2 (goal conflict) ANOVA on the perceived availability of the means for multiple-goal pursuit revealed a main effect of goal conflict (F(1, 194) = 13.75, p < .001), qualified by the predicted interaction (F(1, 194) = 3.07, p = .08;Fig 1). As predicted, when goal conflict seemed high, positive mood made participants think fewer means were available that would be useful for multiple-goal pursuit ($M_{\text{positive}} = 4.10$, $M_{\text{neutral}} = 4.58; F(1, 194) = 3.00, p = .08; d = .35)$. Also as predicted, no comparable effect emerged when goal conflict seemed low ($M_{\text{positive}} = 5.12, M_{\text{neutral}} = 4.94; F < 1$).

INSERT FIG.1 HERE

Mediation analysis. We used the same analysis as in Study1 to test for mediation. Results support the proposed relationship, revealing a significant overall indirect effect (ab = -.08; 95% CI: -.17 to -.01). In the high-conflict condition, the indirect effect of perceived differences was negative and significant (ab = -.12; 95% CI: -.27 to -.02). The indirect effect was not significant, however, in the low-conflict condition (ab = .05; 95% CI: -.05 to .14). These results support our theorizing. When goals appear to be in conflict, a positive mood increased participants' perception that multiple goals differed from one another, thereby reducing the perceived availability of means for multiple-goal pursuit. At the same time, when goal conflict seemed low, we did not observe these effects, highlighting the critical role of inter-goal conflict in our conceptualization.

Study 3 further tests our predictions while addressing the potential concern of Study 2's design. In the previous study, we asked participants to judge goals of other people, and tested general perceptions of means availability. Although this design allowed us to control the content of goals across participants, it limits the generalizability of the study. In the next study, we asked participants to list their own goals. To manipulate goal conflict, we ask half of the participants to consider three goals serving distinct ends (i.e., conflicting goals, as in Studies 1-2), and asked the remaining half to consider three compatible goals that served the same end (i.e., three goals related to being healthy), reducing the need to make inter-goal trade-offs. Finally, unlike Study 2, we asked participants to generate their own means and rate how useful these specific means seemed for multiple-goal pursuit.

Study 3

Method

Participants and design. Members of a national online panel (N = 93) participated in this study in exchange for a small payment. Participants were randomly assigned to a condition in a 2 (mood: positive, negative) X 2 (goals: conflicting, compatible) between-subjects design and asked to complete two ostensibly unrelated tasks.

Procedure. In the first task, we manipulated incidental mood using the word-priming task from Study 1, positive- and negative-mood conditions. In the second task, we asked participants to describe three goals they were currently pursuing within specific goal

categories. In the conflicting-goals condition, these goals served distinct ends: being healthy, succeeding professionally, and having a family. In the compatible-goals condition, these goals served the same end (i.e., being healthy): exercising, managing one's weight, and eating healthfully. A pre-test (N = 42, "To what extent are the goals part of the same concept?" 1 = *Not at all*, 7 = *Very much*) confirmed that participants believed their goals were part of the same concept to a greater extent in the compatible- (M = 5.35) versus conflicting-goals condition (M = 4.20; F(1, 41) = 4.72, p < .04).

Next, participants reported on two 7-point scales ($1 = Not \ at \ all$, $7 = Very \ much$) how different their goals seemed: "How similar are these three goals to one another?" "How different are these three goals from one another?" (r = .89; similarity question reverse-scored).

Finally, after a brief filler task, we asked participants to list three means (products or behaviors) they could use to pursue each of their three goals (nine means in total). We measured how useful the means listed for one goal seemed for pursuing the others (e.g.: "To what extent will the means that you listed as helping you pursue goal 1 [goal 2, goal 3] help you pursue your other two goals at the same time?" $1 = Does not help at all, 7 = Helps very much; \alpha = .87$). Four participants did not complete these usefulness ratings and were excluded from subsequent analyses.

Results and discussion

Perceived differences. A 2 (mood) X 2 (goal conflict) ANOVA on perceived differences between goals revealed an effect of goal conflict (F(1, 89) = 59.88, p < .001), qualified by the predicted interaction (F(1, 89) = 12.09, p < .001; Fig. 2). Consistent with earlier studies, for conflicting goals, positive mood led participants to see their goals as more different ($M_{\text{positive}} = 5.40, M_{\text{negative}} = 4.24$; F(1, 89) = 7.31, p < .01; d = .73). This effect

reversed, however, for compatible goals, for which positive mood led participants to see their goals as more similar ($M_{\text{positive}} = 2.10$, $M_{\text{negative}} = 2.98$; F(1, 89) = 4.83, p < .05; d = .69).

Means evaluations. A 2 (mood) X 2 (goal conflict) ANOVA on the means-usefulness ratings revealed a main effect of goal conflict (F(1, 89) = 27.92, p < .001), qualified by the predicted interaction (F(1, 89) = 12.15, p = .001; Fig. 2). Consistent with Study 2, for conflicting goals, positive mood made participants view their self-generated means as less likely to be useful for multiple-goal pursuit ($M_{\text{positive}} = 3.56, M_{\text{negative}} = 4.56; F(1, 89) = 5.05, p < .05; d = .60$). By contrast, for compatible goals, positive mood made participants view their means as more likely to be useful for multiple-goal pursuit ($M_{\text{positive}} = 6.23, M_{\text{negative}} = 5.11; F(1, 89) = 7.31, p < .01; d = .88$).

INSERT FIG.2 HERE

Mediation analysis. We used the same analysis as in Studies 1&2 to test for mediation. Results support the proposed relationship, revealing a significant overall indirect effect (ab = -.61; 95% CI: -1.12 to -.24). As in Study 1, in the conflicting-goals condition, the indirect effect of perceived differences was negative and significant (ab = -.35; 95% CI: -.71 to -.08). By contrast, in the compatible-goals condition, this indirect effect was positive and significant (ab = .26; 95% CI: .05 to .57).

Results of Study 3 provide additional support for our theory, while manipulating goal conflict and eliciting means evaluations in a different way. The findings demonstrate that when goals seem conflicting (cueing a focus on differences), positive mood decreases the likelihood that means are seen as useful for multiple-goal pursuit, by increasing perceived differences between goals. Conversely and unlike Study 2's results in the low-conflict condition, when goals seem compatible rather than conflicting, positive mood increases the likelihood that means are seen as being useful for multiple-goal pursuit, by reducing perceived differences between the goals. We believe these results are due to the fact that in

the absence of goal conflict, positive mood induces global focus (Huntsinger 2012; Hunsinger et al. 2012; Fishbach & Labroo 2007) and hence leads participants to see more commonalities between their active goals.

Our final study extends the prior findings by exploring how positive mood affects evaluations of specific products that could be used for pursuing multiple goals. In the study, participants sampled two products previously identified as useful for pursuing academic and health goals, and rated how useful the products seemed to each goal separately and both goals together. Further, we used a new mood manipulation to improve the validity of our results.

Study 4

Method

Participants and design. Undergraduate students (N = 84) participated in this study in exchange for course credit. They were randomly assigned to a mood condition (positive vs. neutral) and were asked to complete two ostensibly unrelated tasks.

Procedure. In the first task, we manipulated mood by showing one of two video clips (each two minutes long). In the positive-mood condition, participants viewed a clip of a laughing child, and in the neutral-mood condition, participants viewed a clip of children going about a typical day. A pre-test (N = 94) using the same scale as in the prior mood pre-test ($\alpha = .97$) confirmed that participants experienced more positive feelings in the positive-versus neutral-mood condition ($M_{positive} = 5.75$, $M_{neutral} = 4.34$; F(1, 92) = 41.33, p < .001).

In the second task, we activated two goals commonly held by this population: goals to be healthy and to do well in school. Participants indicated (yes–no) whether they had each goal (all participants reported having an academic goal and 94% reported having a health goal).

Next, participants sampled two products: a 1.5 oz. cup of green tea and a 0.8 oz. nut bar. These products were selected based on a pre-test (N = 101) to verify that both were seen as instrumental for the health and academic goals. Pre-test participants were asked the following question: "How useful do you think nut bars [green tea] would be in helping you achieve both of your goals (health and academic) at the same time?" ($1 = Not \ at \ all$, 7 = Very*much*). One-sample t-tests revealed that both products were perceived as instrumental for both goals (i.e., both means were significantly above the scale mid-point; $M_{tea} = 4.57$, t(100)= 3.72, p < .001; $M_{nut \ bar} = 5.34$, t(100) = 3.72, p < .001).

In the main study, we explicitly described each product as healthy (e.g., "green tea is healthy because it is loaded with antioxidants," "nut bars are healthy because they are made of organic fruits and nuts"), but intentionally left their relation to doing well in school vague. Consequently, whereas all participants should perceive the products as useful for being healthy, we expected positive mood would influence whether the products seemed useful for doing well in school, as well as for pursuing both goals at the same time.

Participants consumed the samples sequentially (order counter-balanced) and rated each in terms of usefulness for their health goal, academic goal, and both goals at the same time ($1 = Not \ at \ all \ useful$, $7 = Very \ useful$). We found no effect of sampling order on these usefulness ratings, or any differences across products (all Fs < 1). We thus standardized the responses and collapsed across order and product type for all remaining analyses.

Results and discussion

A 2 (mood) X 3 (usefulness ratings) repeated-measures ANOVA with mood as the between-subjects factor and usefulness ratings as the within-subjects factor revealed a main effect of mood (F(1, 82) = 4.95, p < .03), qualified by the predicted interaction (F(1, 82) = 4.95, p < .03), qualified by the predicted interaction (F(1, 82) = 4.95, p < .03), qualified by the predicted interaction (F(1, 82) = 4.95, p < .03), qualified by the predicted interaction (F(1, 82) = 4.95, p < .03), qualified by the predicted interaction (F(1, 82) = 4.95, p < .03), qualified by the predicted interaction (F(1, 82) = 4.95, p < .03), qualified by the predicted interaction (F(1, 82) = 4.95, p < .03), qualified by the predicted interaction (F(1, 82) = 4.95, p < .03), qualified by the predicted interaction (F(1, 82) = 4.95, p < .03), qualified by the predicted interaction (F(1, 82) = 4.95, p < .03), qualified by the predicted interaction (F(1, 82) = 4.95, p < .03), qualified by the predicted interaction (F(1, 82) = 4.95, p < .03), qualified by the predicted interaction (F(1, 82) = 4.95, p < .03), qualified by the predicted interaction (F(1, 82) = 4.95, p < .03), qualified by the predicted interaction (F(1, 82) = 4.95, p < .03).

8.32, p < .01). As intended, perceived usefulness for the health goal did not differ across mood conditions ($M_{\text{positive}} = .001$, $M_{\text{neutral}} = -.001$; F < 1).

Importantly, however, mood changed how useful the two products seemed for doing well in school and pursuing both goals at the same time. As predicted, a positive mood decreased how useful the products seemed for doing well in school ($M_{\text{positive}} = -.30$, $M_{\text{neutral}} = .27$; F(1, 82) = 9.68, p < .01; d = .68), and also for pursuing both the academic and health goals at the same time ($M_{\text{positive}} = -.25$, $M_{\text{neutral}} = .23$; F(1, 82) = 6.41, p < .02; d = .55). Consumers' incidental mood state when evaluating real products thus influenced whether those products seemed useful for multiple-goal pursuit.

INSERT TABLE HERE

General discussion

Our findings demonstrate that positive mood plays an important role in multiple-goal pursuit by decreasing the evaluation of multipurpose products that serve conflicting goals. We show that this decrease happens because positive mood makes consumers' conflicting goals appear more different from each other. These findings make several contributions. With respect to the mood literature, we demonstrate that positive mood can increase perceptions of differences between goals. This finding is novel, given that prior work (see, e.g., Isen & Daubman, 1984; Isen et al., 1987; Kahn & Isen, 1993; Lee & Sternthal, 1999) would suggest that cognitive flexibility associated with positive mood should allow consumers to find commonalities between their goals. In our work, we identify goal conflict and need to make trade-offs between multiple goals as a key factor directing consumer focus toward differences instead of similarities. We argue that in this case, cognitive flexibility leads consumers in a positive mood to focus on the salient feature of the judgement task: trade-offs between goals. Future research should identify other contexts that cue a focus on differences, or that make multiple (competing) cues accessible at the same time (e.g., see Urada & Miller, 2000), and explore the effect of mood on evaluations in these contexts.

With respect to the goals literature, prior research compellingly demonstrates that positive mood is beneficial in single-goal contexts (Fishbach & Labroo, 2007; Fishbach, Shah & Kruglanski, 2004). Expanding our understanding of affect and goal pursuit, our work suggests that when consumers hold multiple goals, a positive mood can potentially hinder goal pursuit by decreasing the likelihood that consumers will identify products as being useful for multiple conflicting goals. Future research should further consider the dynamics of multiple-goals pursuit while in a positive mood. As previously discussed, multiple distinct pursuits often create goal conflict, which could threaten one's positive mood. To maintain their positive mood (Wegener & Petty, 1994), consumers may opt for a goal-prioritization strategy, which minimizes goal conflict by focusing on one goal at a time. However, goal prioritization may also threaten one's positive mood, if that one goal is pursued at the expense of others (Köpetz et al., 2011). Instead, consumers may adopt a goal-balancing strategy, whereby they alternate between goals (e.g., Fishbach & Dhar, 2005; Louro, Pieters, & Zeelenberg, 2007). Considering whether positive mood leads consumers to favor one strategy over another could be of interest.

Finally, our findings have implications for marketers. Marketers are increasingly developing multifunctional products, intended to serve many of consumers' needs simultaneously (Brown & Carpenter, 2000; Olson & Reynolds, 1983; Thompson, Hamilton, & Rust, 2005). However, simply positioning products as useful for several consumer goals may not always increase purchases. Our research suggests that consumers who consider purchasing multipurpose products while in a positive mood may undervalue their potential utility. Thus, advertisers should be careful not to pair emotional advertising appeals with explicit multipurpose product claims, but instead focus on one key feature of the product

when using positive affect as advertising tactic. By contrast, multipurpose claims are more appropriate for informational appeals in advertising.

References

- Brenner, L., Rottenstreich, Y. & Sood, S. (1999). Comparison, grouping, and preference. *Psychological Science*, 10 (3), 225-229.
- Brown, C. L. & Carpenter, G. S. (2000). Why is the trivial important? A reasons-based account for the effects of trivial attributes on choice. *Journal of Consumer Research*, 26, 372–385.
- Chun, W. Y., A. W. Kruglanski, D. Sleeth-Keppler & Friedman, R. S. (2011). Multifinality in implicit choice. *Journal of Personality and Social Psychology*, 101, 1124–1137.
- Clore, G.L. & Huntsinger, J.R. (2007). How emotions informs judgments and regulates thought. *Trends in Cognitive Sciences*, 11, 494-499.
- Clore, G.L. & Huntsinger, J.R. (2009). How object of affect guides its impact. *Emotion Review*, 1, 39-54.
- Custers, R. & Aarts, H. (2005). Positive affect as implicit motivator: On the nonconscious operation of behavioral goals. *Journal of Personality and Social Psychology*, 89(2), 129-142.
- Dhar, R. & Sherman, S. J. (1996). The effect of common and unique features in consumer choice. *Journal of Consumer Research*, 23, 193–203.
- Emmons, R. A., L. A. King & Sheldon, K. (1993). Goal conflict and the self-regulation of action. In D. M. Wegner & J. W. Pennebaker (Eds.), *Handbook of mental control* (pp. 528–551). Englewood Cliffs, NJ: Prentice-Hall.
- Fishbach, A. & Dhar, R. (2005). Goals as excuses or guides: The liberating effect of perceived goal progress on choice. *Journal of Consumer Research*, 32(3), 370–377.
- Fishbach, A. & Ferguson, M. J. (2007). The goal construct in social psychology. In A. W. Kruglanski & E. T. Higgins (Eds.), *Social psychology handbook of basic principles* (pp. 490–515). New York: NY, Guilford Press.

- Fishbach, A. & Labroo, A. A. (2007). Be better or be merry: How mood affects self-control. *Journal of Personality and Social Psychology*, 93(2), 158–173.
- Fishbach, A., J. Shah & Kruglanski, A. W. (2004). Emotional transfer in goal systems. Journal of Experimental Social Psychology, 40, 723–738.
- Gati, I. & Tversky, A. (1984). Weighting common and distinctive features in perceptual and conceptual judgments. *Cognitive Psychology*, 16, 341–370.
- Gervey, B., E. R. Igou & Trope, Y. (2005). The role of positive mood in pursuing primary self-evaluation goals. *Motivation and Emotion*, 29(4), 269–296.
- Gilbert, D. T., R. B. Giesler & Morris, K. A. (1995). When comparisons arise. *Journal of Personality and Social Psychology*, 69, 227–236.
- Hayes, A. F. (2013). Introduction to mediation, moderation, and conditional process analysis. Guilford Press, New York
- Huntsinger, J.R. (2012) Does positive affect broaden and negative affect narrow attentional scope? A new answer to an old question, *Journal of Experimental Psychology: General*, 141(4), 595-600.
- Hunsinger, M., L. M. Isbell & Clore, G. L. (2012). Sometimes happy people focus on the trees and sad people focus on the forest: Context-dependent effects of mood in impression formation. *Personality and Social Psychology Bulletin*, 38(2), 220–232.
- Isen, A. M. & Daubman, K. A. (1984). The influence of affect on categorization. Journal of Personality and Social Psychology, 47, 1206–1217.
- Isen, A. M., K. A. Daubman & Nowicki, G. P. (1987). Positive affect facilitates creative problem solving. *Journal of Personality and Social Psychology*, 52, 1122–1231.
- Kahn, B. E. & Isen, A. M. (1993). The influence of positive affect on variety seeking among safe, enjoyable products. *Journal of Consumer Research*, 20, 257–270.

Köpetz, C., T. Faber, A. Fishbach & Kruglanski, A. W. (2011). Multifinality constraints effect: How goal multiplicity narrows the means set to a focal end. *Journal of Personality and Social Psychology*, 100, 810–826.

- Kruglanski, A.W., Kopetz, C., Belanger J.J., Chun W.Y, Orehek, E. & Fishbach, A. (2012), Features of multifinality. *Personality and Social Psychology Review*, 17(1), 22-39.
- Kruglanski, A. W., Shah, J. Y., Fishbach, A., Friedman, R., Chun W. Y. & Sleeth-Keppler,
 D. (2002). A theory of goal systems. In M. P. Zanna (Ed.), *Advances in experimental* social psychology (pp. 331–376). New York: Academic Press.
- Labroo, Aparna A. & Patrick, V.M. (2009). Psychological distancing: Why a positive mood helps see the big picture, *Journal of Consumer Research*, 35(5), 800–9.
- Lee, A. Y. & Sternthal, B. (1999). The effects of positive mood on memory. *Journal of Consumer Research*, 26, 115–127.
- Louro, M. J., R. Pieters & Zeelenberg, M. (2007). Dynamics of multiple-goal pursuit. *Journal* of Personality and Social Psychology, 93(2), 174.
- Mather, M. & Sutherland, M.R. (2012). Arousal-biased competition in perception and memory. *Perspectives on Psychological Science*, 6(2), 114-133.
- Medin, D. L., R. L. Goldstone & Gentner , D.(1993). Respects for similarity. Psychological Review, 100, 254–278.
- Murray, N., H. Sujan, E. R. Hirt & Sujan, M. (1990). The influence of mood on categorization: A cognitive flexibility interpretation. *Journal of Personality and Social Psychology*, 59(3), 411–425.
- Olson, J. C. & Reynolds, T. J. (1983). Understanding consumers' cognitive structures: Implications for advertising strategy. In L. Percy & A.G. Woodside (Eds.), *Advertising and consumer psychology*, (pp. 77–90) Lexington, MA: Lexington Books.

- Pyone, J. S. & Isen, A. M. (2011). Positive affect, intertemporal choice, and levels of thinking: Increasing consumers' willingness to wait. *Journal of Marketing Research*, 48(3), 532–543.
- Schwarz N. & Clore, G.L (1983). Mood, misattribution and judgments of well-being: Informative and directive functions of affective states, *Journal of Personality and Social Psychology*, 45, 513-523.
- Simonson, I., Nowlis, S.M. & Simonson, Y.(1993). The effect of irrelevant reference arguments on consumer choice. *Journal of Consumer Psychology*, 2, 287-306.
- Thompson, D. V., R. W. Hamilton & Rust, R. T. (2005). Feature fatigue: When product capabilities become too much of a good thing. *Journal of Marketing Research*, 42, 431–442.
- Tversky, A. & Simonson, I. (1993). Context-dependent preferences. *Management Science*, 39, 767–778.
- Urada, D. I. & Miller, N. (2000). The impact of positive mood and category importance on crossed categorization effects. *Journal of Personality and Social Psychology*, 78(3), 417.
- Wegener, D.T. & Petty, R. E. (1994). Mood management across affective states: The hedonic contingency hypothesis. *Journal of Personality and Social Psychology*, 66, 1034– 1048.
- Zhang, Y., A. Fishbach & Kruglanski, A. W. (2007). The dilution model: How additional goals undermine the perceived instrumentality of a shared path. *Journal of Personality and Social Psychology*, 92, 389–401.

Fig 1. Study 2: Positive mood increased perceived differences between goals (Panel A), and decreased the perceived availability of means for multiple-goal pursuit (Panel B), moderated by inter-goal conflict.

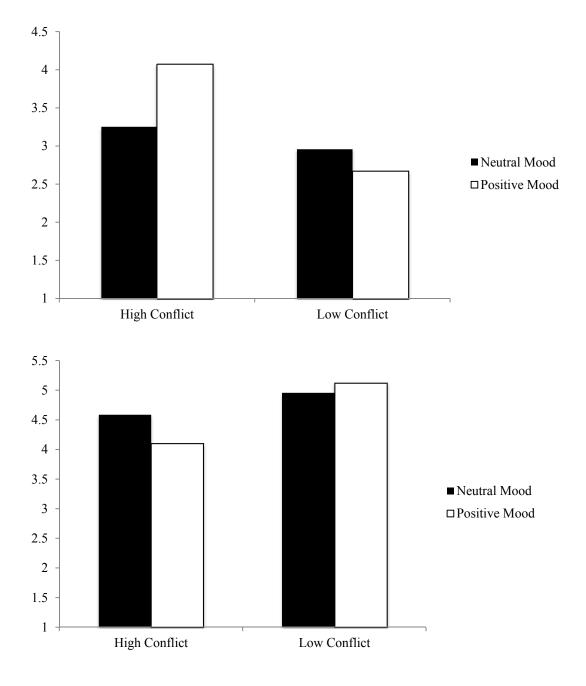
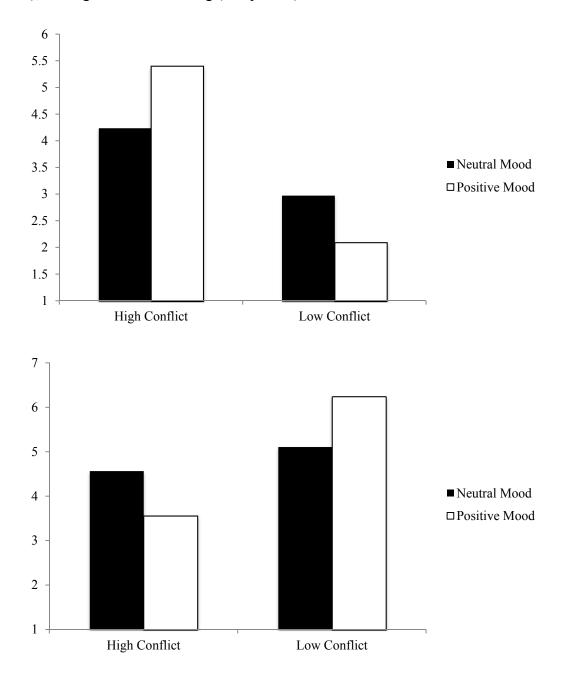


Fig 2. Study 3: Positive mood increased (decreased) perceived differences between goals(Panel A), and decreased (increased) how useful means seem for multiple-goal pursuit (Panel B), when goals are conflicting (compatible).



Recent ESMT Working Paper

	ESMT No.
Contracting in medical equipment maintenance services: An empirical investigation	14-05
Tian Chan, INSEAD Francis de Véricourt, ESMT Omar Besbes, Columbia University	
Designing luxury experience	14-04
Vadim Grigorian, Pernod Ricard Francine Espinoza Petersen, ESMT	14 04
Financing capacity investment under demand uncertainty	14-03
Francis de Véricourt, ESMT Denis Gromb, INSEAD	
Government guarantees and bank risk taking incentives	14-02
Markus Fischer, Goethe-Universität Frankfurt am Main Christa Hainz, ifo Institute for Economic Research	
Jörg Rocholl, ESMT Sascha Steffen, ESMT	
What do patent-based measures tell us about product commercialization? Evidence from the pharmaceutical industry	14-01
Stefan Wagner, ESMT	
Simon Wakeman, ESMT	
Technology commercialization strategy in a dynamic context: Developing specialized complementary assets in entrepreneurial firms	11-02 (R4)
David H. Hsu, The Wharton School, University of Pennsylvania Simon Wakeman, ESMT	
The equivalence of bundling and advance sales	13-11
Alexei Alexandrov, Consumer Financial Protection Bureau, Washington DC Özlem Bedre-Defolie, ESMT	
Hidden efficiencies: On the relevance of business justifications in abuse of dominance cases	13-10
Hans W. Friederiszick, E.CA Economics, ESMT Linda Gratz, E.CA Economics	

ESMT European School of Management and Technology Faculty Publications Schlossplatz 1 10178 Berlin Germany

Phone: +49 30 21231-1279 publications@esmt.org http://www.esmt.org/faculty-research/research-and-development/publications