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Feedback information and consumer motivation

The moderating role of positive and negative reference values in self-regulation

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Received July 2008
Revised August 2009
Accepted August 2009

Abstract

Purpose – Marketers spend considerable resources to motivate people to consume their products and services as a means of goal attainment. Why people change their consumption behaviour is based largely on these goals; many products and services are used by consumers in an effort to attain hoped-for selves and/or to avoid feared selves. Despite the importance for marketers in understanding how current performance influences a consumer's future efforts, this topic has received little attention in marketing research. The aim of this paper is to fill some of the gaps.

Design/methodology/approach – The paper provides a theoretical framework and uses two studies to test this. Study 1, of 203 women, aged 27-65, examines the predictions in the context of women and visible signs of skin aging. Feedback information is measured and approach and avoidance regulatory systems are manipulated by priming hoped-for and feared possible selves. Study 2, of 281 undergraduate men and women, replicates the findings of Study 1 with manipulated feedback, using a different context (gym training) and a sample of both male and females.

Findings – The research shows that when consumers pursue a hoped-for self, it is expectations of success that most strongly drive their motivation. It also shows why doing badly when trying to avoid a feared self is more motivating than doing well.

Practical implications – The findings have important implications as they reveal how managers can motivate customers to keep using a product or service.

Originality/value – The paper makes several contributions to the consumer goal research literature since little is known about how positive (hoped-for selves) and negative (feared selves) reference points in self-regulation differentially influence consumer goal-directed behaviour.

Keywords Feedback, Consumer marketing, Motivation (psychology), Affirmative action

Paper type Research paper

1. Introduction

Marketers spend considerable resources to motivate people to consume their products and services as a means of goal attainment (Bagozzi and Dholakia, 1999). Why people increase, decrease, or stop consuming some products is based largely on how well they perceive they are doing in pursuit of their goals (Carver and Scheier, 1992). Yet despite the importance for marketers in understanding how current performance influences a consumer's future efforts, this topic has received little attention in marketing research.

The authors thank Russell Belk, Rik Pieters, Hans Baumgartner, Peter Danaher, and Simon Pervan for helpful comments.

European Journal of Marketing
Vol. 45 No. 6, 2011
pp. 963-986

0309-0566
DOI 10.1108/03090561111119976

Goal researchers generally agree that feedback about how well or how poorly people are doing in achieving their goals affects their motivation (Bandura and Cervone, 1986; Locke and Gray, 1990). Yet there is less agreement about whether positive and negative performance feedback increases or decreases future effort (Locke and Gray, 1990). For instance, while a customer of a gym might cancel his membership after receiving negative feedback about his fitness, the same negative feedback might cause another customer to visit the gym more often to achieve better results. A similar logic can apply to many products and services from the use of cosmetics to investing in mutual funds. The present research offers managers key insights into how to engage customers and keep them motivated. Given that connecting customers with the company is a top research priority for managers (Marketing Science Institute, 2006), this article provides suggestions for performance metrics including four questions that managers can use to apply the findings.

Goal literature argues that human behavior is broadly organized around approaching positive end states and avoiding negative end states (Carver, 1996; Davidson, 1998; Higgins, 1997). Self-regulation theories such as control theory (Carver and Scheier, 1992, 1999) distinguish between approach behaviors aiming to attain a positive reference point and avoidance behaviors aiming to escape a negative reference point. Markus and Nurius (1986) distinguish between approaching hoped-for possible selves and avoiding feared-possible selves. Although regulation away from negative selves has not been considered in regulatory focus theory (RFT, Higgins, 1987), a similar dual distinction exists between promotion and prevention self-regulation. Most of this literature holds that these tendencies have asymmetric effects on cognitive, emotional and behavioral processes (e.g. Carver, 1996; Gray, 1994). In particular, Carver and Scheier (1999) maintain that approach and avoidance systems control goal pursuit and regulate emotional reactions to how well one is doing in pursuing those goals. For instance, success is posited to result in cheerful emotions in approach goal pursuit and relaxation in avoidance goal pursuit. In contrast, failure results in dejection in approach goal pursuit and agitation in avoidance goal pursuit. The effects of approach and avoidance systems parallel those of promotion and prevention foci in RFT (Higgins, 1987), which has inspired research on the effects of discrete affective states in marketing. This body of research suggests that different affect qualities, even with the same valence, may exert different influences on consumer judgments and decision-making (Bosman and Baumgartner, 2005; Hamilton and Biehal, 2005; Keller, 2006; Raghunathan *et al.*, 2006; Yi and Baumgartner, 2004; Zeelenberg and Pieters, 2004). The current research examines how priming hoped-for selves and feared selves moderate consumer goal-directed efforts. Using a control theory perspective, we predict that regulatory referencing moderates the impact of how fast a goal is being achieved (i.e. attaining a hoped-for self/avoiding a feared self), and the perceived distance of the actual self from the hoped-for or feared self on consumer motivation. The article also provides insight into the psychological processes underlying these effects.

The present research contributes in two ways. First, the research adopts the regulatory referencing perspective of control theory (Carver and Scheier, 1982, 1999), thus, studies behavior in relation to positive and negative reference points. This is important because many customers buy products and services to approach desired end

states (e.g. being attractive, healthy, rich) or to prevent negative end states (e.g. being unattractive, unhealthy, poor) (Morgan, 1993; Patrick *et al.*, 2003; Sobh, 2006). RFT conceptualizes approach and avoidance in terms of self-regulation towards two types of desired states – ideals and oughts, which invoke two distinct types of strategies to attain them (Higgins, 1987, 1997). To achieve an ideal self (e.g. having a beautiful body), the promotion system relies on approach strategies; such as pursuing a means for advancement (e.g. exercising and eating healthy food). To achieve an ought self (e.g. having to be a responsible father) however, the prevention system relies on avoidance strategies; such as being careful and avoiding to do things (e.g. refraining from drinking or smoking). However, the present article follows control theory and conceptualizes approach and avoidance in terms of movement in relation to desired end states (hoped-for selves) and undesired end states (feared selves). Control theory (Carver and Scheier, 1992) distinguishes between discrepancy-reducing behavior aiming to bring individuals closer to their desired end states and discrepancy-enlarging behaviors aiming to increase the distance between individuals and their undesired end states. What begins as avoidance (discrepancy enlarging behavior) leads to approach however; that is, at some point a desired end state is identified and approach behavior is engaged. In this case, the person is simultaneously trying to avoid the anti-goal and approach the goal. This combination is represented in the RFT concept of the ought self (Carver, 2006).

We do not claim that control theory and RFT are completely distinct theories. Most motivational functions implied by RFT and control theory converge (Leone *et al.*, 2005). Nevertheless, RFT and control theory have some structural differences and could not be considered as equivalent (Carver, 1996). A key difference between the two theories relates to the predicted effects of perceived performance on subsequent motivation. RFT holds that in goal pursuit, affect arises from feedback about the discrepancy between a current state and a reference value (goal proximity). Yet control theory makes better predictions by maintaining that affect results both from feedback about the rate of perceived goal progress and from feedback about goal proximity. Thus, the current article provides a comprehensive test of the relationships between motivation, progress rate and proximity to a goal in the context of consumer behavior. More specifically, this article proposes that regulatory referencing moderates the impact of how fast a goal is unfolding (perceived progress), and where someone stands (the perceived distance of the actual self from the hoped-for/feared self) on consumer motivation. This is important because it improves understanding of the relationship between feedback valence and subsequent motivation, which has been described as a dilemma (Kluger and DeNisi, 1996) and provides insight into consumer goal-directed efforts. Second, unlike existing research, which suggests that the effects of feedback on performance is moderated by individuals' regulatory concerns (promotion versus prevention) without explaining what causes this compatibility (e.g. Förster *et al.*, 1998; Idson and Higgins, 2000), the current article provides insight into the processes underlying these effects. For instance, this research demonstrates that cheerfulness/dejection and quiescence/agitation associated with approach and avoidance self-regulation have different effects on consumer goal-directed efforts. Thus, the present work goes beyond existing theorizing about the asymmetric effects of discrete affective states on consumer motivation.

The theoretical framework is tested across two experiments. Study 1 examines the predictions in the context of women and visible signs of skin aging. Feedback information is measured and approach and avoidance regulatory systems are manipulated by priming hoped-for and feared possible selves. Study 2 replicates the findings of study 1 with manipulated feedback, using a different context (gym training) and a sample of both males and females.

2. Conceptual framework

2.1 Feedback valence and future goal-directed efforts

Goal theorists generally agree that feedback about how well or poorly people are doing in attaining their goals affects their subsequent motivation (e.g. Bandura and Cervone, 1986; Locke and Gray, 1990). Similarly, self-regulation theories such as self-discrepancy theory (Higgins, 1987) and control theory (Carver and Scheier, 1992, 1999) support a feedback-based approach that keeps people on track in moving toward their goals. However, generally theories do not agree about whether positive and negative performance feedback increases or decreases subsequent motivation. One stream of research builds on the hedonic principle that people are motivated to approach pleasure and avoid pain (Freud, 1946). Accordingly, people should continue with an activity if they experience positive emotion stemming from positive performance feedback, but cease an activity if they experience negative emotion from negative feedback.

Yet control theory proposes that slower-than-expected progress in reaching a goal causes people to exert more effort to reduce the gap between their current state and the goal. When positive feedback indicates faster than expected progress rate, people decrease their effort so their rate of progress conforms to prior expectations. Ironically, control theory suggests that failure motivates more than success. These contrasting predictions about the effect of feedback valence on performance are reflected in empirical studies (Carver and Scheier, 1999; Locke and Gray, 1990). For instance, a meta-analysis of 131 studies, Kluger and DeNisi (1996) indicates that although feedback improves performance on average, it reduces it in more than one third of the cases. In addition, positive and negative feedback do not differentially affect performance. The authors conclude that the feedback-performance relationship is not well understood.

A study by Louro *et al.* (2007) suggests that positive and negative emotions resulting from feedback about progress rates can have diametrically opposing effects on goal-directed behavior, depending on goal proximity. Positive feedback is more motivating for people when they are distant from their goals rather than when they are close. Negative feedback is more motivating when people are close to their goals, but not when they are distant. Some psychological work on RFT investigates the moderating role of regulatory focus which suggests that positive and negative feedback effects are moderated by an individual's promotion or prevention regulatory focus (e.g. Idson and Higgins, 2000). Yet this research makes only general appeals to compatibility without explaining what causes this compatibility.

Overall, the aforementioned research contributes significantly to understanding how feedback valence affects motivation. However, these studies deal with regulating behavior towards goals, and most focus only on discrepancy-reducing behavior (positive selves). Although discrepancy-reducing behavior is the most commonly

discussed type of self-regulation (Higgins, 1987), it is not the only kind. There are also discrepancy-enlarging behaviors which increase a person's distance from a feared possible self (Carver and Scheier, 1992; Markus and Nurius, 1986). These undesired end states could be thought of as "anti-goals" that individuals try not to embody as compared to goals that individuals strive to attain (Carver, 2006). Further, the question remains how feedback information impacts motivation for discrepancy-reducing and discrepancy-enlarging behaviors.

2.2 Control theory: a feedback-based approach

Control theory posits a feedback-based approach to self-regulation where people can adjust their goal-directed efforts. This theory suggests that goal-directed efforts are sensitive to two different aspects of performance in relation to goals:

(1) one's perceived rate of progress towards attaining goals (e.g. hoped-for selves) or preventing anti-goals (e.g. feared selves); and

(2) one's perceived distance from these goals or anti-goals.

It also proposes that a person's reaction to feedback can be affective (positive and negative affect), cognitive (expectancy for success or failure), and/or behavioral (exerting goal-directed effort). However, the two direct outcomes of the feedback process are affect and expectancy for success or failure, which are thought to mediate the effect of feedback on subsequent motivation and behavior.

2.2.1 Reactions to feedback information. Affect. According to self-discrepancy theory (Higgins, 1987), feedback indicating a discrepancy between an actual state and a reference value causes negative affect. Carver and Scheier (1992) suggest that the rate of progress causes affect more than the perceived discrepancy. If progress is too low, negative affect results, but if it is too high (exceeding the criterion) positive affect results. If the rate is only acceptable, there is no affect. Further, Carver (2001) proposes that approach and avoidance regulation has the potential to induce positive emotion when doing well and negative emotion when doing poorly.

Outcome expectancy. It is the likelihood of goal attainment. People periodically assess the likelihood of goal attainment by using feedback information, leading to high or low expectancies for success (Carver and Scheier, 1992). Small discrepancies (large in a discrepancy-enlarging feedback process) and/or faster than expected progress, should lead to high expectancies, whereas large discrepancies (small in a discrepancy-enlarging feedback process) and/or slower than expected progress should lead to low expectancies for success, allowing for a cognitive influence on behavior.

2.2.2 Mediators of feedback information on subsequent motivation. Outcome expectancy. An expectancy judgment has immediate implications on goal-oriented efforts (Carver and Scheier, 1992). If a person expects a successful outcome, they expend effort towards that goal. However, if doubt is strong enough, the person begins to disengage from further effort.

Affect. In addition to expectancy effects on goal-directed efforts, affect is also likely to have a direct influence on subsequent motivation. According to control theory (Carver and Scheier, 1999), negative affect results from slower than expected progress, and positive affect from faster than expected progress. Assuming negative affect is unpleasant, people should increase their rate of progress to reduce negative affect.

Increasing the rate does not only mean increasing the pace of physical action but also making different choices amongst available options such as consuming a different product or following a different diet (Carver, 2006). However, when the rate of progress is faster than expected, individuals should lower their effort to bring it in line with the criterion, freeing up personal resources that can be channelled towards other goals (Carver, 2003).

In discrepancy enlarging behavior (avoiding a feared self), slow progress triggers negative high-arousal emotion (e.g. fear) while fast progress triggers positive low-arousal emotions (e.g. relief). Carver (2001) proposes that high arousal energizes more than low arousal, so slow progress should motivate more than fast progress. In discrepancy reducing behavior (approaching a hoped-for self), slow progress triggers negative low-arousal emotions (e.g. disappointment) while fast progress triggers positive high arousal emotions (e.g. excitement). Since high arousal energizes more than low arousal, fast progress should motivate more than slow progress. Accordingly, the current research predicts that for people avoiding a feared-self, failure is more motivating than success. In this case, the motivating role of the negative affect resulting from a small discrepancy or slow progress rate is likely to outweigh the discouraging effect of the expectancy of failure, which is theorized to deter further efforts. Conversely, low arousal positive emotion (e.g. relief) resulting from positive feedback is likely to cause individuals to relax, slow down their efforts and shift them to alternative goals (Carver, 2003). However, for people approaching a hoped-for self, success should maintain motivation more than failure since positive high arousal emotion (e.g. excitement) resulting from positive feedback promotes goal-directed efforts. Conversely, negative low arousal emotion (e.g. disappointment) resulting from negative feedback should deter further effort. Our predictions are also in line with the compatibility principle posited by regulatory focus theory and based on which, success maintains motivational intensity more than failure among promotion focused individuals, whereas, failure maintains motivational intensity more than success among prevention focused individuals (e.g. Förster *et al.*, 1998; Idson and Higgins, 2000).

H1. The type of behavior engaged in (discrepancy-reducing vs discrepancy-enlarging) moderates the impact of perceived progress and distance on subsequent motivation.

H1a. Negative feedback about progress rate (slower than expected progress) is more motivating for individuals regulating away from their feared selves than for those regulating towards their hoped-for selves. On the other hand, positive feedback (faster than expected progress) is more motivating for individuals regulating towards their hoped-for selves than for those regulating away from their feared selves.

H1b. Negative feedback about goal proximity (being close to a feared possible/distant from a hoped-for self) is more motivating for individuals regulating away from their feared selves than for those regulating towards their hoped-for selves. On the other hand, positive feedback (distant from a feared self/close to a hoped-for self) is more motivating for individuals regulating towards their hoped-for selves than for those regulating away from their feared selves.

In addition, research suggests that individuals' response to the behavioral-inhibition system associated with avoidance behavior is more likely to result from affective processes than the behavioral-activation system associated with approach behavior (Gray, 1990). This work suggests that responses to threat have an urgency generally lacking in responses to incentives (Carver, 2001). Besides, previous research (e.g. Schwartz and Bohner, 1996; Schwartz and Clore, 1983) reveal that when fear is experienced, individuals rely more on their affect than internal cognitive states in making judgements. However, affect is less incorporated in judgement when positive emotions are experienced. Accordingly, we expect that, in general, people are compelled to prevent a threat from occurring. Thus, when avoiding a feared self, people are more likely to discredit the cognitive value of feedback and agitation emotion becomes the main driver. Yet because approaching positive outcomes has less urgency, people should persist in pursuing a hoped-for self only when they have reasonably high expectations for success.

H2. The type of behavior engaged in (discrepancy-reducing vs discrepancy-enlarging) moderates the impact of mediating variables (affect and expectancy for success or failure) on subsequent motivation. Specifically, the effects of feedback on subsequent motivation are more strongly mediated by outcome expectancy than by affect when approach behavior (hoped-for self) is engaged.

H2a. For consumers seeking a hoped-for self, the effects of feedback on subsequent motivation are more strongly mediated by outcome expectancy than by affect.

H2b. For consumers avoiding a feared self, the effects of feedback on subsequent motivation are more strongly mediated by affect than by outcome expectancy.

3. Study 1

Aging is perceived as an inevitable process yet people believe they can slow down the process if they are willing to spend money on anti-aging products and services (e.g. moisturizing crèmes and surgery). This study is restricted to women. Compared to men, women are more concerned with visible signs of aging (Sayre, 1999). Focusing on women ensured a sufficient number of participants with possible selves in the domain of interest. Women are also frequently exposed to feedback regarding their age. This feedback can result from personal judgment (e.g. looking for facial lines in the mirror), comments from partners (e.g. "you're starting to look like your mom"), or from comparing themselves with other people, including those in the media. This frequent exposure to feedback makes skin aging a relevant context for examining how feedback shapes goal-directed efforts. In addition, the consumption of anti-aging products has become a multi-billion dollar industry (Weintraub, 2006).

3.1 Method

3.1.1 Participants, design and procedure. A total of 203 women (103 in the hoped-for self condition $M = 43.5$ years, $SD = 9.8$ years, 100 in the feared self condition $M = 43.5$ years, $SD = 10.4$) were recruited from a cosmetics store mailing list to participate in the study. Participants were randomly assigned to one of the two conditions by receiving one of two versions of a survey. Respondents were predominantly of Anglo-European

descent (69 percent) and ranged in age from 27 to 65 years (M = 43.7 years, SD = 9.4). A one-factor (self type: hoped-for self, feared self) between-subjects design was employed.

The questionnaire started by assessing participants' concern with visible signs of skin aging and actual behavior in relation to dealing with these signs. Next, a guided imagery task activated women's hoped-for possible selves (e.g. looking younger than other people of my age) versus feared possible selves (e.g. looking older than other people of my age) (see Appendix 1).

After the imagery manipulation, participants were provided with three hoped-for selves (keep having a youthful looking skin when I grow older, look a few years younger than my age, look younger than other people of my age) or feared selves related to skin aging (having an unattractively old looking skin when I grow older, look older than my age, look older than other people of my age) and were asked to choose the most relevant one for them (the possible selves were derived from those most frequently listed by women in a pre-test survey when they were asked about appearance-related possible selves). They were then instructed to answer the remainder of the questionnaire.

The questionnaire assessed cognitive responses at the end as a manipulation check for the priming of hoped-for selves and feared selves. Participants provided the reasons for using anti-aging products and services. Two judges analyzed these responses and identified salient positive versus negative end states in the reasons provided. Interrater agreement was 98 percent.

3.1.2 Measures. Besides measuring demographics, concern with visible signs of skin aging and actual consumption behavior of age defying products and services, the questionnaire measured the six following constructs (see Appendix 2):

(1) goal proximity ($r = 0.97$);

(2) progress rate ($r = 0.94$);

(3) quiescence/agitation-related affect ($r = 0.90$);

(4) cheerfulness/dejection-related affect ($r = 0.88$);

(5) expectancy for success ($r = 0.92$); and

(6) subsequent motivation ($r = 0.89$).

Factor analyses were performed on all dependent variables that consisted of three or more items. Since the items comprising all such groups loaded on single factors and formed reliable scales, composite scores were created for analyses.

3.2 Results and discussion

3.2.1 Manipulation check. As expected, the number of positive end states identified by participants was higher in the hoped-for self-condition (M = 3) than in the feared self condition (M = 1.5) and the difference is statistically significant ($T = 14.97, p < 0.001$). Similarly, the number of negative end states identified by participants was higher in the feared self condition (M = 2.9) than in the hoped for condition (M = 1.4) and the difference is statistically significant ($T = 15.78$, $p < 0.001$).

3.2.2 Confound check. Since the questionnaire used in the current study measured perceived rate of progress and distance and did not manipulate them, the authors

tested whether the self-type manipulation influenced perceived progress rate and goal proximity and thus contributed to the observed effects. However, the authors ruled out this possibility because ANOVAs of the manipulation on the goal proximity ($F(1, 203) = 0.79, p = 0.34$) and progress rate measures ($F(1, 203) = 0.53, p = 0.56$) indicated that these were independent of the manipulation. Treatment means for all measures are reported in Table I.

3.2.3 Hypotheses testing. *H1a* predicted that negative feedback about progress rate (negative feedback valence) is more motivating for feared selves than hoped-for selves. *H1b* predicted that negative feedback about goal proximity is more motivating for those avoiding feared selves than for those approaching hoped-for selves. A 2 (self type: hoped-for self versus feared self) × 2 (progress rate feedback valence: positive versus negative) × 2 (goal proximity feedback valence: positive versus negative) analysis of variance (ANOVA) was performed on subsequent motivation.

For progress rate feedback valence, participant data are coded as positive when progress scores are greater than or equal to zero (same or above expectations) and coded as negative (below expectations) when progress scores are less than zero (study 1: positive coding 98 participants, negative coding 106 participants; study 2: positive 138 participants, negative 138 participants). For goal proximity feedback valence, participant data are coded as positive for proximity scores greater than four, and coded as negative for scores less than and equal to four. In both cases, data for feared-selves is reverse coded (study 1 positive: 98 participants, negative: 105 participants; study 2: 128 positive, 149 negative). Consistent with expectations, a significant self type × feedback valence interaction is evident for motivation ($F(1, 203) = 8.14, p < 0.01$). As displayed in Figure 1, planned contrasts show that failure (negative progress) motivates women more than success (positive progress) when seeking to avoid a feared self ($M_{Failure} = 5.4$ and $M_{Success} = 4.4, F(1, 100) = 8.15, p < 0.01$). Yet success motivates more than failure when women aim to attain a hoped-for self ($M_{Success} = 5.3$ and $M_{Failure} = 4.2$, $F(1, 103) = 9.02$, $p < 0.01$). These results support *H1a*.

Further, a significant self type × goal proximity feedback valence interaction is evident for motivation ($F(1, 203) = 6.18$, $p < 0.05$). As shown in Figure 2, planned contrasts show that negative proximity feedback about being close to a feared self motivates women more than positive proximity feedback indicating distance from the feared self ($M_{Negative} = 5.1$ and $M_{Positive} = 4.2, F(1, 100) = 9.02, p < 0.01$). Yet for the hoped-for self there is no difference in motivation based on the distance from the goal ($M_{Positive} = 5.2$ and $M_{Negative} = 4.6$, $F(1, 103) = 1.51, p = 0.075$). These results partially support *H1b*. Using regression analyses, the authors now explore the underlying processes accounting for these effects.

3.2.4 Mediation analysis. *H2* predicts that the effect of feedback on subsequent motivation is more strongly mediated by affect than by expectancy when feared selves are activated, and that the opposite is true when hoped-for selves are activated. To test the mediating effects of outcome expectancy and affect, the authors conducted regression analyses for progress rate feedback and goal proximity feedback for hoped-for selves and feared selves respectively (Baron and Kenny, 1996). More specifically, the authors regressed:

- motivation on progress rate;
- outcome expectancy on progress rate;

Table I.
Means, standards and correlations by condition

Constructs		GP	Exp	Prog	Agi. A	Dej. A	Act. B	S. Mot
Goal proximity (GP)	Approach	1						
	Avoidance	1						
Outcome expectancy (Exp)	Approach	0.54**	1					
	Avoidance	0.13	1					
Progress rate (Prog)	Approach	0.44**	0.46**	1				
	Avoidance	0.29**	0.42**	1				
Agi. affect	Approach	-0.23**	-0.19**	-0.28**	1			
	Avoidance	-0.37**	-0.15*	-0.29**	1			
Dej. affect	Approach	-0.50**	-0.53**	0.44**	0.33**	1		
	Avoidance	-0.11	-0.34**	-0.27**	0.21**	1		
Act. behavior	Approach	0.21**	0.25**	0.14*	0.02*	-0.15	1	
	Avoidance	0.01	0.23**	0.17*	0.05	-0.13	1	
S. motivation	Approach	0.20**	0.38**	0	0.19*	0.07	0.33**	1
	Avoidance	0.45**	0.20*	0.14	0.38**	0.04	0.31*	1
Mean	Approach	4.04	4.50	4.21	3.20	3.90	2.40	5.00
	Avoidance	4.14	4.37	4.19	4.01	2.80	2.46	5.03
Std. D	Approach	1.62	1.16	1.12	1.35	1.35	0.93	1.52
	Avoidance	1.47	1.10	1.00	1.32	1.37	0.87	1.47

Notes: * $p \leq 0.05$; ** $p \leq 0.01$; Agi. A = Agitation affect; Dej. A = Dejection affect; Act. B = Actual behavior; S. Mot = Subsequent motivation

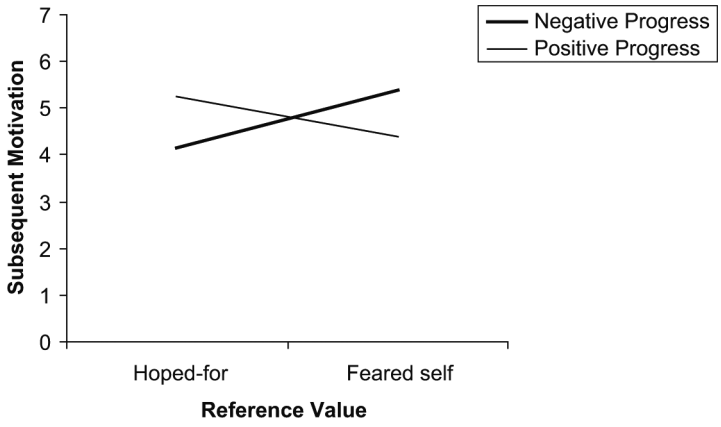

Figure 1.
Study 1: the interaction of the type of self-pursued and perceived rate of progress on subsequent motivation

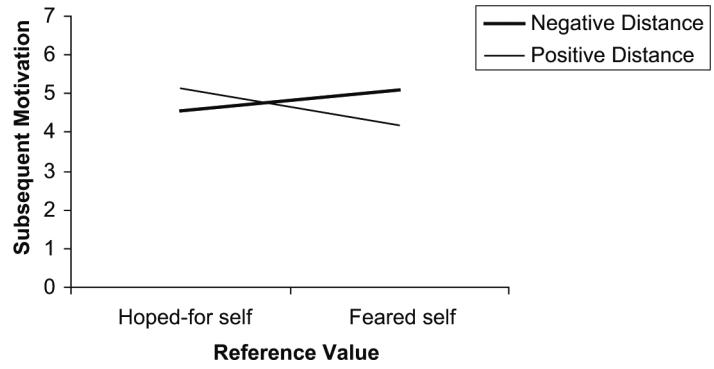

Figure 2.
Study 1: the interaction of type of self-pursued and goal proximity feedback valence on subsequent motivation

- agitation affect on progress rate;
- dejection affect on progress rate; and
- motivation on progress rate, outcome expectancy, agitation affect and dejection affect.

For consumers seeking a hoped-for self (*H2a*), as displayed in Table II, a significant effect for progress rate feedback is evident for motivation ($b = 0.40$, $p < 0.001$). Progress also has a significant effect on outcome expectancy ($b = 0.45$, $p < 0.001$), agitation affect ($b = -0.27$, $p < 0.01$) and dejection affect ($b = -0.44$, $p < 0.001$). Importantly, the effect of progress rate feedback is eliminated when outcome expectancy, agitation affect and dejection affect are included in the model ($b = 0.04$, NS). Further, when all predictors are included in the model, outcome expectancy had the strongest significant coefficient ($b = 0.37$, $p < 0.001$) as compared with agitation affect ($b = 0.09$, NS) and dejection affect ($b = 0.14$, $p < 0.05$). Thus, both expectancy and affect mediate the effect of progress on motivation but outcome expectancy has the stronger effect. This supports *H2a*.

	Study 1		Study 2	
	Hoped-for self	Feared self	Hoped-for self	Feared self
A. Progress rate feedback				
Progress → SM	0.40***	0.37***	0.39***	0.56**
Progress → Agitation affect (AA)	-0.27**	-041**	-0.54***	-0.23**
Progress → Dejection affect (DA)	-0.44***	-0.28**	-0.35***	-0.56***
Progress → Outcome expectancy	0.45***	0.43**	0.56***	n.s.
AA → SM	n.s.	0.39***	n.s.	0.31***
DA → SM	0.30***	0.19*	0.17*	0.17*
Expectancy → SM	0.38**	0.20**	0.68***	n.s.
Progress → SM (with AA, DA and outcome expectancy)	n.s.	n.s.	0.20*	0.26*
B. Goal proximity feedback				
Proximity → SM	0.29***	0.27***	0.17*	0.19*
Proximity → Agitation affect (AA)	-0.13*	-0.22**	n.s.	-0.18*
Proximity → Dejection affect (DA)	-0.20***	n.s.	-0.18*	n.s.
Proximity → Outcome expectancy	0.43***	0.37***	n.s.	0.19*
AA → SM	n.s.	0.39***	n.s.	0.31***
DA → SM	0.30***	0.19*	0.17*	0.17*
Expectancy → SM	0.38**	0.20**	0.68***	n.s.
Proximity → SM (with AA, DA and outcome expectancy)	n.s.	n.s.	n.s.	0.16*

Table II.
Studies 1 and 2: tests of mediation on subsequent motivation

Note: Values shown are standardized coefficients. $^{*}p < 0.05$; $^{**}p < 0.01$; $^{***}p < 0.001$; SM = Subsequent motivation; n.s. = Not significant ($p > 0.05$)

Similarly for goal proximity feedback, a significant effect for proximity is evident for motivation ($b = 0.29$, $p < 0.001$). Proximity also has a significant effect on outcome expectancy ($b = 0.43$, $p < 0.001$), agitation affect ($b = -0.13$, $p < 0.05$) and dejection affect ($b = -0.20$, $p < 0.001$). Importantly, the effect of goal proximity is eliminated when outcome expectancy, agitation affect and dejection affect are included in the model ($b = 0.09$, NS). Further, when all predictors are included in the model, outcome expectancy has the strongest significant coefficient ($b = 0.28$, $p < 0.001$) as compared with agitation affect ($b = 0.10$, $p < 0.05$) and dejection affect ($b = 0.19$, $p < 0.01$). Thus, both expectancy and affect mediate the effect of progress on motivation but outcome expectancy has the stronger effect. These results are consistent with *H2a*.

For consumers avoiding a feared self (*H2b*), the effect for progress rate on motivation is significant ($b = 0.37$, $p < 0.001$). Progress significantly affect agitation affect ($b = -0.41$, $p < 0.01$) and dejection affect ($b = -0.28$, $p < 0.01$) and outcome expectancy ($b = 0.43$, $p < 0.01$). The effect of progress rate is eliminated when outcome expectancy, agitation affect and dejection affect are included in the model ($b = 0.09$, NS). This model also reveals the influence of agitation affect ($b = 0.36$, $p < 0.001$) and dejection affect ($b = 0.17$, $p < 0.05$). Outcome expectancy also has a comparable effect to dejection affect ($b = 0.15$, $p < 0.05$).

For goal proximity (reverse scored), a significant effect for proximity is evident for motivation ($b = 0.27$, $p < 0.001$). Proximity also has a significant effect on outcome expectancy ($b = -0.37$, $p < 0.001$), agitation affect ($b = -0.22$, $p < 0.01$) but not

dejection affect ($b = -0.09$, NS). Proximity has no effect when outcome expectancy, agitation affect and dejection affect are included in the model ($b = 0.06$, NS), and in this model, agitation affect has a stronger effect ($b = 0.30$, $p < 0.001$) than outcome expectancy ($b = 0.19$, $p < 0.01$) or dejection affect ($b = 0.16$, $p < 0.01$). For both progress and proximity, agitation affect is more strongly associated with motivation ($b = 0.39$, $p < 0.001$) than dejection affect ($b = 0.19$, $p < 0.05$) or expectancy ($b = 0.20$, $p < 0.01$). These results offer partial support for *H2b* and suggest that agitation affect is the primary driver of motivation when consumers avoid a feared self. However, the results of study 1 apply to the skin care industry and to females. These findings may be more compelling if convergent evidence is obtained with manipulated feedback, using a different context (gym training) and a sample of both males and females. Study 2 examines these issues.

4. Study 2

4.1 Method

4.1.1 Participants, design *and procedure.* A total of 281 undergraduates (131 males, 150 females) are randomly assigned to a 2 (self type: hoped-for self, feared self) × 2 (performance feedback: positive, negative) between-subjects factorial design. Following study 1, after assessing their concern with body shape on two items ("How my body looks is important to me", and "My body shape is of concern to me", 1 = not at all, 7 = very much, $r = 0.81$), a guided imagery task activated participants' hoped-for possible selves (e.g. looking fit) vs feared possible selves (e.g. looking fat). Participants then listed all of the hoped-for (feared) selves they hope to become (don't want to become) related to their body. The following gym scenario manipulated performance feedback (negative feedback in parentheses):

> Imagine you have joined a gym. On your first day, you meet with a qualified personal trainer who measures your weight, gives you a fitness assessment and designs a program specifically for you and what you want to achieve. You agree to train for a month using your program and then meet again when the trainer will assess your progress. For a month, you train exactly as the program suggests – performing exercises in the correct manner and in the exact amount specified in the program. When you meet the personal trainer again for an assessment to check on your progress, you find that you have greatly over-performed (greatly under-performed) with regard to your expectations.

In total, 69 percent of participants belong to the university gym – or have used it during the previous year – and all are concerned with body shape. This ensures that the scenario of going to the gym is realistic and relevant for all participants. Besides, the use of convenient samples of undergraduate students is widely used and accepted in lab experiments in consumer behavior and psychology research, especially when scenarios are used, that is when participants are asked to imagine situations, rather than actually experiencing them. The literature is replete with such examples like imagining a wealth state (Idson and Higgins, 2000), a transaction role (Monga and Zhu, 2005), an investment situation (Pham and Avnet, 2004), a hypothetical purchase trip and purchase situations (Dahl *et al.*, 2005). As with study 1, the questionnaire assessed cognitive responses at the end as a manipulation check for the priming of hoped-for selves and feared selves. Participants provided the reasons why in this scenario they would join the gym. The measures are identical to study 1 (goal proximity: $r = 0.88$,

progress rate: $r = 0.82$ agitation affect: $r = 0.69$, dejection affect: $r = 0.79$, expectancy: $\alpha = 0.90$, motivation: $\alpha = 0.90$). The questionnaire also assessed covariates with the potential to be relevant to body shape relating to appearance self-esteem and weight locus of control. Four seven-point scales are used to measure appearance self-esteem (Heatherton and Polivy, 1991) (e.g. "I am pleased with my appearance right now", 1 = strongly disagree, 7 = strongly agree, $\alpha = 0.81$). Four items from Saltzer (1982) measure Weight locus of control (e.g. "Whether I gain, lose, or maintain my weight is entirely up to me", 1 = strongly disagree, 7 = strongly agree, $\alpha = 0.67$). However, since these variables failed the assumption checks for covariance analysis (e.g. uncorrelated with the dependent variable), they are excluded from the analysis and are not discussed further.

4.2 Results and discussion

4.2.1 Manipulation check. In support of the approach-avoidance priming manipulation, the number of positive end states identified by participants was higher in the hoped-for self-condition (M = 3.1) than in the feared self condition (M = 0.5) and the difference is statistically significant (T = 21.97, $p < 0.001$). Similarly, the number of negative end states identified by participants was higher in the feared self-condition (M = 2) than in the hoped for condition (M = 1.3) and the difference is statistically significant (T = 10.78, $p < 0.005$). The authors included a performance feedback manipulation check where participants rate their perceived progress at the gym (1 = below expectations, 7 = above expectations). As expected, performance feedback is judged more positively for the positive feedback condition (M = 5.5) than in the negative feedback condition (M = 3.7, $F(1, 274) = 79.89, p < 0.001$). No gender main effects or interactions are significant for the manipulation checks (ps > 0.23).

4.2.2 Hypotheses testing. In support of *H1a* a significant self type × feedback valence interaction is evident for motivation ($F(1, 274) = 31.81$, $p < 0.001$). Specifically, planned contrasts show that failure (negative progress) motivates more than success (positive progress) when avoiding a feared self ($M_{Failure} = 5.4$ and $M_{Success} = 4.8, F(1, 128) = 7.81$, $p < 0.01$). Yet success motivates more than failure when consumers pursue a hoped-for self ($M_{Success} = 5.4 \text{and} M_{Failure} = 4.4$, $F(1, 146) = 27.16$, $p < 0.001$).

In support of *H1b*, a significant self type × goal proximity interaction is present for motivation ($F(1, 273) = 8.74$, $p < 0.01$) where being close to a feared self (negative feedback) motivates more than being distant from a feared self ($M_{Negative} = 5.5$ and $M_{Positive} = 5, F(1, 127) = 4.64, p < 0.05$). Yet being close to a hoped-for self motivates more than being distant ($M_{Positive} = 5.3$ and $M_{Negative} = 4.8$, $F(1, 146) = 4.4$, $p < 0.05$). These results support *H1b*. No significant main effects or interactions are present for gender (ps > 0.32).

4.2.3 Mediation analysis. The authors conducted the same mediation analyses as in study 1. Findings are generally consistent with study 1 (see Table II). For consumers seeking a hoped-for self, progress rate has a significant effect on motivation ($b = 0.39$, $p < 0.001$), outcome expectancy ($b = 0.56$, $p < 0.001$), agitation affect ($b = -0.54$, $p < 0.001$) and dejection affect ($b = -0.35$, $p < 0.001$). Further, the effect of progress rate is reduced by 49 percent when outcome expectancy, agitation affect and dejection affect are included in the model ($b = 0.20$, NS). Further, when all predictors are

included in the model, outcome expectancy has the strongest significant coefficient ($b = 0.64$, $p < 0.001$) as compared with agitation affect ($b = 0.15$, $p < 0.05$) and dejection affect ($b = 0.22$, $p < 0.01$). Thus, both outcome expectancy and affect partially mediate the effect of progress rate on motivation but outcome expectancy has the stronger effect. This supports *H2a*.

For the proximity model, goal proximity has a significant effect on motivation ($b = 0.17, p < 0.05$) as did dejection affect ($b = -0.18, p < 0.05$). Outcome expectancy is not associated with goal proximity ($b = 0.14$, NS) but it has a direct effect on motivation ($b = 0.68, p < 0.001$). No paths for agitation affect are significant. Yet the effect of goal proximity is eliminated when outcome expectancy, agitation affect and dejection affect are included in the model ($b = 0.08, \text{NS}$). In this model, outcome expectancy has the strongest coefficient ($b = 0.64$, $p < 0.001$) as compared with agitation affect ($b = 0.15, \text{NS}$) and dejection affect ($b = 0.15$, $p < 0.05$). Thus, both expectancy and affect mediate the effect of progress on motivation but outcome expectancy has the stronger effect. This supports *H2a*.

For the feared self-data, progress rate directly affect motivation ($b = 0.56$, $p < 0.01$), agitation affect ($b = -0.23$, $p < 0.01$) and dejection affect ($b = -0.56$, $p < 0.001$), but not outcome expectancy ($b = 0.07, \text{NS}$). Further, the effect of progress is reduced by 54 percent when the full model of all predictors was tested ($b = -0.26$, $p < 0.05$). This model reveals that agitation affect is responsible for this partial mediation of motivation ($b = 0.32, p < 0.001$) unlike dejection affect ($b = 0.13, \text{NS}$) or expectancy ($b = 0.09, \text{NS}$).

Likewise goal proximity affect motivation ($b = 0.19$, $p < 0.05$), agitation affect ($b = -0.18, p < 0.05$) and expectancy ($b = -0.19, p < 0.05$), but not dejection affect ($b = 0.08, \text{NS}$). Further, the effect of goal proximity is reduced by 16 percent when all predictors are tested ($b = 0.16, p < 0.05$). This model reveals that agitation affect is responsible for this partial mediation of motivation ($b = 0.31$, $p < 0.001$) unlike dejection affect ($b = 0.02, \text{NS}$) or expectancy ($b = 0.04, \text{NS}$). Overall, the feared self-data partially supports *H2b*.

5. General discussion

Many of the products and services available today are used by consumers in an effort to attain hoped-for selves and/or to avoid feared selves (Morgan, 1993; Patrick *et al.*, 2003; Sobh, 2006). The present research examines how the reference value in self-regulation (i.e. moving towards a hoped-for future self or moving away from a feared future self) influences consumers' motivation. The current report shows how the interaction between where someone stands and how fast progress towards their goal is unfolding, can have different implications on motivation depending on the type of self that is salient.

When consumers are avoiding a feared self, failure to escape the feared state motivates more than success. When consumers seek a hoped-for self, successful progress towards that goal is more motivating than failure although this result was less robust than the finding for the feared self. The current research also provides evidence that when consumers pursue a hoped-for self, it is expectations of success that most strongly drive their motivation. Yet for the feared self, affect, particularly feelings of agitation, drive motivation. Given that agitation is associated more with an

avoidance feedback loop than with an approach feedback loop, this article shows why doing badly when trying to avoid a feared self is more motivating than doing well.

5.1 Managerial implications

These findings have important implications for managers as they reveal how managers can motivate customers to keep using a product or service. The key for managers and frontline staff is to understand what type of self is being pursued, how far a customer feels they are from that self, and what progress customers feel they are making towards their goals. If customers buy the product to attain a hoped-for self, they can be motivated by highlighting:

- positive feedback on how close the customer is to the hoped-for self (e.g. by emphasizing tangible improvements as an indicator of successful progress); and
- how their progress is faster than they should expect (e.g. by setting conservative expectations and showing how they have exceeded them).

This feedback on attainment and rate of progress should be personalized. For instance, in the case of a gym targeting novice body builders, a customized e-mail newsletter with testimonials from customers with the same profile (e.g. age, weight) showing desired results from persisting with the fitness program could be used (e.g. a chart showing time series improvements of increased muscle mass). Alternatively, feedback sessions with frontline staff (e.g. a personal trainer) should address distance from goal and progress rate and then frame feedback accordingly. This emphasis on progress towards goal attainment offers marketers the potential for cross-selling other products as part of a proposed solution to further accelerate attainment of the hoped-for self.

If customers buy the product to avoid a feared self, marketers can motivate customers by highlighting:

- negative feedback of how close the customer is to the feared self (e.g. by noting symptoms denoting the onset of the feared self); and
- how progress needs improving (e.g. providing evidence of the ineffectiveness of a competitor's product currently used by the customer or setting challenging expectations for performance).

Of course, feedback on progress needs to be realistic so customers do not become dejected and lose motivation.

Managers can operationalize these findings by asking customers four questions: the type of self being pursued (preferably open-ended to avoid biased responses), and single item scores for rate of progress, distance from goal, and motivation (see Appendix 3). These questions provide actionable, clear-cut metrics for frontline staff to maximize customer motivation. Indeed, this information could be integrated into a marketing information system to ensure that personalized communications to customers (e.g. e-mail newsletters) are framed in the optimal way.

Further, findings reported in the current article have the potential to help managers gain a more complete understanding of products and services that use fear appeals. Rather than just emphasizing a negative outcome and how the product is a solution to that problem, campaigns should focus on how close the consumer is to the feared self and how progress is positive but requires repeated consumption to succeed. To this

end, this research offers insights into successful brands. For example, Listerine® mouthwash is a successful brand with a surprisingly astringent taste. Yet the success of this brand fits our control theory perspective. Rather than emphasizing a hoped-for self of social success, there is an emphasis in promotions on the feared self (e.g. a person with gum disease). The proximity of the consumer to the feared self is highlighted (e.g. linking signs of plaque on teeth to potential gum disease) and progress away from the feared self is highlighted as lacking (e.g. showing how toothbrushes do not clean between teeth but that Listerine reduces plaque significantly but not totally). This approach works well as we speculate that customers seeing plaque when checking in the mirror feel close to the feared self and are motivated to keep using the mouthwash to avoid further plaque and potential gum disease.

Findings could also be implemented among health care practitioners to keep people motivated to pursue healthy behaviors, and refrain from unhealthy ones (e.g. eating healthy, exercising, quitting smoking). For instance, in situations where pursuing the goal turns out to be challenging and feedback about how someone is doing in relation to its attainment is more likely to be negative (e.g. following a diet and not losing weight as fast as expected), activating a negative reference value to be avoided (e.g. looking fat and being unhealthy) would be preferred to maintain motivational intensity and prevent people from giving up. However, in other situations where performance feedback is more likely to be positive and people might be tempted to slow down or stop pursuing their goals (e.g. exercising and feeling almost in good shape), activating a positive reference value to be approached (e.g. regaining full health and stamina) would be preferred to maintain motivational intensity.

5.2 Theoretical contributions, limitations and future research directions

The present article makes several contributions to the consumer goal research literature since little is known about how positive (e.g. hoped-for selves) and negative (e.g. feared selves) reference points in self-regulation differentially influence consumer goal-directed behavior. Several studies examine consumer implicit goals from a regulatory focus perspective (e.g. Aaker and Lee, 2001; Bosman and Baumgartner, 2005; Jain *et al.*, 2006; Keller, 2006; Louro *et al.*, 2007; Pham and Avnet, 2004; Raghunathan *et al.*, 2006). This research extends current understanding about how implicit goals influence consumer behavior by examining approach and avoidance consumer goal strivings from a control theory perspective (Carver and Scheier, 1992). Although control theory has attracted support in psychology (e.g. Carver *et al.*, 2000; Davidson, 1998; Louro *et al.*, 2007), it has remained unexplored in marketing.

This research suggests that control theory offers useful insights to researchers. First, and unlike RFT, it reveals that goal-directed efforts are regulated by both emotions arising from goal progress in goal pursuit and the current proximity to goal attainment. Thus, the current research is the first to provide empirical evidence for the theorized link between these two types of performance feedback and subsequent flow of goal-directed efforts in the context of consumer behavior. Second, it shows that discrepancy-reducing (i.e. seeking the hoped-for self) and discrepancy-enlarging (i.e. avoiding the feared self) goal-directed behaviors have different impacts on consumer motivation. Third, it provides an explanation for those asymmetric effects. Specifically, an important question this research sought to answer is whether differences in affect

quality lead to different motivational outcomes, and if so, the reasons why? Findings revealed that success and failure have opposing effects on subsequent motivation. This research shows that the effects of feedback information are more strongly mediated by affect than by outcome expectancy when avoidance behavior is engaged, whereas the opposite is true when approach behavior is engaged. Further, this research reveals that emotions of the same valence (i.e. quiescence/agitation and cheerfulness/dejection emotions) may follow different paths and exert different effects on motivation. Given that agitation affect is more associated with an avoidance feedback loop than with an approach feedback loop, the present research shows why doing badly in an avoidance feedback loop is more motivating than doing well. Thus, this finding contributes to RFT, which has only made general appeals to compatibility in order to explain the relationship of approach/avoidance with success/failure (Idson and Higgins, 2000). More specifically, this research explains why success maintains motivational intensity more than failure among promotion-focused individuals, whereas, failure maintains motivational intensity more than success among prevention focused individuals.

Findings reported in this article also contribute to solving the contrasting findings in the literature dealing with the relationship between feedback valence and performance. When and how positive or negative feedback increases or decreases motivation has been described as a dilemma (e.g. Kluger and DeNisi, 1996; Ilgen and Davis, 2000). This research shows that this dilemma can be partly solved by examining regulatory referencing (Carver and Scheier, 1992, 1999) and reveals that the impact of where someone stands and how fast a goal is unfolding on subsequent motivation is moderated by the type of behavior engaged. Specifically, failure feedback information is more motivating than success feedback information when consumers aim to enlarge the gap between their current state and a negative reference value. On the other hand, success feedback is more motivating when consumers aim to reduce the gap between their current state and a positive reference value.

However, findings from both studies indicate that these effects depend on where someone stands. When consumers seek to avoid a feared self, slower than expected progress away from a negative reference point motivates more when one is close to the undesired end state, and this motivation decreases as one moves away. In contrast, success motivates more when one is close to rather than distant from a hoped-for self. This finding suggests that the classic motivational principle of the "goal looms larger effect" where motivational strength increases as distance from the goal decreases (Förster *et al.*, 1998; Lewin, 1935; Miller, 1944) applies only when consumers are trying to achieve a hoped-for self. A reverse effect is found when behavior aims to enlarge the distance from a feared self. Further, reported findings suggest that future research on customer loyalty could benefit from exploring the effects of a customer's perceived distance from their goal and rate of progress towards that goal.

Some limitations of this research should be mentioned. However, these limitations do not detract from the multiple strengths of the present work and only provide a platform for future research. First, in both studies approach and avoidance feedback loops were triggered by activating negative and positive reference values for self-regulation, feared possible selves and hoped for selves, respectively. As argued previously in the present paper, and as Higgins (1997) pointed out, there is a distinction between regulatory focus (at the strategic level) and regulatory reference point

investigated in the present research. It is possible that our manipulation also elicited regulatory focus mechanisms. For example, it could be that our manipulation of hoped-for selves triggered in addition to a positive reference value a promotion focus associated with the desire to achieve positive outcomes. Thus, on the applied level it is important to ascertain whether it is simply the regulatory reference point that is responsible for the identified asymmetries and interaction effects or whether the presence of other theoretical constructs contributed to the identified results. Future research should address this limitation by ensuring that the effects of regulatory reference principle are clearly disentangled from those of regulatory focus effects. Second, in the current research our theoretical claims were tested in two contexts that both relate to physical appearance; aging and body shape. Future studies should test these relationships in different consumption contexts and for other types of purposive behaviors to improve the robustness of our findings. Last, in study 2 a convenient students' sample was used, unlike in study 1. Although most recruited students use or have used the gym during the previous year, it is undeniable that the use of a non student sample of actual gym users would have been preferable to improve the strength of our theoretical conclusions.

In conclusion, the present article is an attempt to provide a comprehensive test of relationships proposed by control theory between subsequent motivation and performance feedback in goal pursuit in the context of consumer behavior. It improves our understanding of a crucial issue for marketing managers; why some customers continue striving and consuming vs giving up and would be particularly useful in terms of resource allocation. Specifically, the impact of different marketing activities (e.g. permission e-mail newsletters, company web sites, front line personnel) in providing feedback to customers could be assessed relative to expenditure in resources to determine the most effective mix of variables to ensure customers stay motivated and continue consuming the product or service. Research suggests that positive and negative feedback about performance can cause individuals to focus on alternative goals and/or more achievable goals (Carver, 2003; Locke and Gray, 1990; Louro *et al.*, 2007). A useful avenue for future work would be to study how regulatory referencing influences how consumers choose and pursue these alternative and more achievable goals. Such research could also provide marketing managers insight into how customers could be redirected to other products in the company's product portfolio that match their new goals.

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Appendix 1

Priming of possible selves

Priming of hoped-for selves

We all think about our future to some extent. When doing so, we usually have vivid representations of how we might be or look in the future. We then imagine how we hope we look like in the future. Academics call these visualized desired images of us in the future, *hoped-for selves*.

Take a moment to think about the hoped-for selves you aspire to become in the future. In particular, those related to your physical appearance. Think of a particular situation where being these hoped-for selves is very important (e.g. a social occasion, being with your partner, etc.).

In the space below, list and describe the hoped-for selves you just visualized for yourself.

Priming of feared selves

We all think about our future to some extent. When doing so, we usually have vivid representations of how we might be or look in the future. Sometimes we have images of how we might look in the future that we fear or dread, selves we don't want to become. Academics call these visualized dreaded images of us in the future, *feared selves.*

Take a moment to think about all the dreaded selves you don't want to become in the future. In particular, those related to your physical appearance. Think of a particular situation where not being these dreaded selves is very important (e.g., a social occasion, being with your partner, etc.).

In the space below, list and describe the dreaded selves you just visualized for yourself.

Figure A1.

Appendix 2

Measures

Goal proximity. In this study, goals represent hoped-for selves to be attained and anti-goals or feared selves to be avoided. A two-item measure (1 = not at all, 7 = very much) assessed proximity to attaining (preventing) the hoped-for (feared) possible self. The first item asked, "To what extent does this hoped for self (feared possible self) currently describe you?" and the second asked, "How close/far do you believe you are to that hoped for possible self (feared possible self)?"

Progress rate. Participants rated their progress rate towards attaining (preventing) the hoped-for (feared) self as compared with their expectations, on a seven- point scale (−3 = very much below expectations, 0 = same as expectations, 3 = very much above my expectations). A second item asked, "compared to what I expected, progress rate towards (away from) this possible self is . . ." (1 = much worse than I expected, 7 = much better than I expected).

Quiescence/agitation-related affect and cheerfulness/dejection-related affect. Two items measured agitation affect (tense and relaxed) and two measured dejection affect (discouraged and happy items were reverse coded). These seven-point measures are from Carver *et al.* (1999) and were anchored by not at all – extremely.

Expectancy for success. Three items assessed expectancy of goal attainment (i.e. attaining or avoiding a possible self); "How likely do you think that this possible self could be achieved (prevented)? (1 = not at all likely, 7 = very much likely), "To what extent do you expect to attain (prevent) this possible self (1 = not at all, 7 = very much) and "How confident are you about achieving/preventing this possible self" (1 = not at all confident, 7 = very much confident).

Subsequent motivation. Four seven-point items (1 = strongly disagree, 7 = strongly agree) measured two facets of motivation:

Motivation to exert goal-directed efforts was measured by "I am willing to put forth a great deal of effort beyond what I'd normally do to achieve this hoped-for self/prevent this feared self", and "I would be prepared to invest a lot of effort to attain this hoped-for self/prevent this feared self"; and

Intention to persist with goal-directed efforts was measured by "I would keep trying to attain this hoped-for self/prevent this feared self no matter how difficult it was" and "Even if trying to attain this hoped-for self/prevent this feared self was really difficult, I would continue to try".

Appendix 3

Four questions for managers to ask customers

1. Please describe what type of future self or picture of yourself you are trying to achieve or avoid by using our product (service):

2. How close (far) do you believe you are to that future self?

Not at all	1	2	3	4	5	6	7	Very much

3. Compared to what I expected, progress towards (away from) this possible self is

Much worse than I expected	1	2	3	4	5	6	7	Much better than I expected

4. I would be prepared to invest a lot of effort to attain this hoped-for self/prevent this feared self

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

Figure A2.

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