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# **Satisfaction pursuing approach and avoidance goals: Effects of regulatory fit and individual temperaments**

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## **Abstract**

Going beyond previous studies on satisfaction in pursuing approach versus avoidance goals, the current study is the first to examine individual satisfaction in pursuing approach and avoidance goals as determined by regulatory fit between type of goal and type of strategy. Specifically, the present study shows that people with approach goals have greater satisfaction when they use an approach strategy rather than an avoidance strategy. People with avoidance goals have greater satisfaction when they use an avoidance strategy rather than an approach strategy. In addition, we explored how individual differences in the Behavioral Activation System and the Behavioral Inhibition System influenced reactions to approach and avoidance goals and strategies.

## **Keywords**

Satisfaction, Approach Avoidance, Regulatory fit, Behavioral approach system, Behavioral inhibition system

## **Introduction**

Individuals can pursue the same goal with different strategies. Imagine a student with a goal of maintaining a good GPA in her classes. She can implement a diverse set of strategies while working toward her goal. For example, she could pursue the goal by focusing on scoring well on quizzes or by actively participating in classes. She could also pursue the same goal by focusing on avoiding being late to her classes or by not chatting with her friends during classes. Given these contrasting strategies, which strategy would give her greater enjoyment and satisfaction in pursuing her goal?

One answer can be found in the regulatory fit literature which posits that interactions between type of goal and type of strategy influence the satisfaction individuals experience during goal pursuit.

In the present study we investigate people's satisfaction in goal pursuit as a function of approach and avoidance regulatory fit. To date, studies have identified characteristics of goals (Elliot 2006; Elliot et al. 1997) and individual temperaments (Carver and White 1994) as determinants of satisfaction during goal pursuit. No study, however, has examined the effect of approach and avoidance regulatory fit on satisfaction. This is an important gap in our understanding because approach and avoidance orientation is one of the fundamental frameworks for understanding human motivation and people with approach and avoidance goals differ in their satisfaction depending on the types of strategies that they implement. To address this gap, the current study adopts the novel approach of considering the effects of approach and avoidance regulatory fit on satisfaction.

In addition to studying approach and avoidance regulatory fit of goals and strategies, we also examine how individual differences in approach and avoidance temperaments influence the effects of approach and avoidance goals and strategies on satisfaction. While previous studies generally support the idea that individual differences in approach and avoidance temperaments influence the extent to which they adopt approach and avoidance daily goals (Elliot and Thrash 2002), it is unclear whether individuals with different motivational temperaments (i.e., BAS and BIS; Carver and White 1994) feel greater or less satisfaction pursuing approach and avoidance goals and using approach and avoidance strategies. Addressing this question is important because it will provide a more complete and more nuanced understanding of factors that influence the personal outcomes of pursuing approach and avoidance goals. In the following section we consider prior research on satisfaction in pursuing approach and avoidance goals. We then highlight the fact that previous regulatory fit studies have overlooked the effects of approach and avoidance regulatory fit on satisfaction.

### **Satisfaction in pursuing approach and avoidance goals**

Scholars have argued that human motivation can be understood as based on two fundamental processes of approach and avoidance which stem from hedonic principles of approaching positive outcomes and avoiding negative outcomes (Carver and Scheier 1998; Elliot 1999). People with approach goals aim to attain positive outcomes or states such as getting a good grade, having better health, or making a new friend; people with avoidance goals aim to avoid negative outcomes or states such as failing a class, losing their health, or losing a close friend. To date, studies have generally shown that pursuing approach goals compared to avoidance goals gives individuals greater satisfaction in pursuing the goal (Elliot and Sheldon 1997). Scholars have identified several reasons for lower satisfaction in pursuing avoidance goals. Elliot and Sheldon (1997) argued that pursuing avoidance goals makes people focus on negative outcomes, which increases anxiety and worry and decreases satisfaction. Carver (2006) suggested that approach goals involve discrepancy-reducing loops which allow people to gauge their progress toward the goal, but avoidance goals involve discrepancy-enlarging loops where people try to increase their distance from an undesired outcome. As a result, pursuing avoidance goals creates ambiguity about progress toward the goal and prevents them from gaining satisfaction (Carver 2006; Elliot et al. 1997).

Moving beyond the above main effect arguments, other research has advanced more complex models that propose moderated effect predictors of satisfaction in pursuing approach and avoidance goals. For example, Elliot et al. (2001) demonstrated that culture influenced the extent to which individuals were satisfied with approach versus avoidance goal pursuit. Pursuing an avoidance goal compared to an approach goal in a collectivistic society produced higher satisfaction because sensitivity to negative information helps individuals attain better rewards in cultures that emphasize fitting in. In contrast, individualistic cultures emphasize standing out. Accordingly, sensitivity to positive information helps individuals in these contexts attain better rewards. Building on this notion, we argue that the fit between type of strategy and type of goal (approach and avoidance) influences satisfaction in pursuing each goal.

### **Understanding regulatory fit theory**

When people pursue goals using strategies that are consistent with the fundamental nature of the goal, this results in regulatory fit (Higgins 2000). Regulatory fit theory posits that using matched means and goals has incremental positive effects on one's overall experience—above and beyond the end result itself. Higgins (2006), for example, explained that regulatory fit increases the strength of engagement and intensifies the value of the experience for the individual. Given that the same goal can be achieved using different strategies, the match between type of goal and type of strategy creates a sense of “doing it right” and increases the perceived value of goal pursuit (e.g., Koenig et al. 2009; Idson et al. 2004).

Studies have shown the incremental value from promotion/prevention regulatory fit on performance, goal completion, and engagement. For example, Keller and Bless (2006) showed that students with regulatory fit between chronic regulatory focus (i.e., promotion and prevention focus) and framing of a cognitive test using gain (i.e., promotion focus) versus non-loss (i.e., prevention focus) performed better. Spiegel et al. (2004) showed that regulatory fit between chronic promotion/prevention regulatory foci and strategic means facilitated goal completion. In this study, participants were prompted to use eagerness or vigilance strategies when working toward the goal of turning a report in on time. Regulatory fit between chronic regulatory foci and strategy led to more timely goal completion. In a related vein, Freitas and Higgins (2002) showed that regulatory fit increased engagement (the extent to which participants found the task interesting, enjoyable, and exciting). Those who were primed with a promotion focus reported higher engagement when they used eagerness strategies (i.e., circling matching shapes) and those primed with a prevention focus reported higher engagement when they used vigilance strategies (i.e., cross out mismatching shapes).

While research initially focused on regulatory fit as a function of promotion and prevention focus, more recent studies provide strong evidence that regulatory fit is not limited to promotion/prevention focus because there are different conceptualizations of regulatory fit. For example, Avnet and Higgins (2003) showed that when individuals were primed with a locomotion regulatory mode (versus an assessment regulatory mode), they showed regulatory fit with a progressive elimination strategy (versus a full comparison strategy) for making decisions. In a negotiation situation, Appelt et al. (2009) showed regulatory fit for negotiating role such that sellers experienced fit with a promotion focus and buyers experienced fit with a prevention focus. They

explained that sellers in negotiations typically have to ensure gain against non-gain; whereas buyers have to ensure non-loss against loss. Finally, Higgins et al. (2010) showed regulatory fit effects for type of task: fun (i.e., Shoot-the-Moon game) versus important (i.e., financial duties task) and rewards (framed as enjoyable or serious). In their study, people showed greater willingness to play the game or complete the task again when the reward framing fit the task (when the Shoot the Moon game had a “carnival prize” reward and the financial task had “a job salary” reward).

While these studies demonstrate powerful effects of regulatory fit, the notion that satisfaction can be enhanced by both approach and avoidance regulatory fit has been overlooked. Perhaps this is because promotion and prevention regulatory foci are positively related to approach and avoidance goals (Sullivan et al. 2006; Higgins et al. 1994), and this has lead scholars to ignore the idea of regulatory fit based on approach and avoidance goals. This omission, however, is not theoretically consistent with conceptual differences in promotion—prevention regulatory focus and approach—avoidance goals. That is, while scholars acknowledge positive correlations between approach—avoidance goals with promotion—prevention regulatory foci, they also argue that these two sets of concepts are distinct. For example, Carver et al. (2000) and Higgins et al. (1994) positioned promotion and prevention foci as approach goals because both aim to achieve desired outcomes based on ideal self versus ought self. Moreover, studies that have examined regulatory fit effects for approach and avoidance goals with promotion and prevention foci find no support for interactions between the concepts (Sullivan et al. 2006). This suggests that the mechanisms for approach and avoidance goals versus promotion and prevention foci differ. Accordingly, it is important not to view the constructs as equivalent.

Consistent with prior regulatory fit research, we predict that the match between type of goal (approach and avoidance goals) and strategic means (approach and avoidance strategies) will predict satisfaction with goal pursuit. Thus for our hypothesis, we predict that approach and avoidance regulatory fit will increase satisfaction. Specifically, using an approach strategy for approach goals creates approach regulatory fit such that goal pursuit is experienced positively and satisfaction is higher compared to lack of fit, such as pursuing an approach goal with an avoidance strategy. Likewise, for avoidance goals, using an avoidance strategy creates avoidance regulatory fit such that the experience of avoiding negative outcomes is positive and satisfaction is higher compared to using an approach strategy.

### **Individual differences in behavioral approach and behavioral inhibition systems**

To obtain a more comprehensive understanding of factors that influence satisfaction while pursuing approach and avoidance goals, the current study also considers individual differences in approach and avoidance temperaments. Specifically, we adopted Gray’s Reinforcement Sensitivity Theory (RST) (Gray 1990). RST distinguished two neurobiological systems that are responsible for individuals’ sensitivity in approaching positive/desirable stimuli and avoiding negative/undesirable stimuli: the Behavioral Activation System (BAS) and the Behavioral Inhibition System (BIS). Gray (1990) explained that BAS is activated by positive/desirable cues and facilitates individuals’ movement toward attaining such stimuli. In contrast, BIS is activated by negative/undesirable cues and facilitates individuals’ movement away from such stimuli. In sum, BAS can be viewed as an

approach dispositional tendency and BIS as an avoidance tendency (Carver and White 1994; Bjornebekk 2007).

RST offers a unique contribution to motivational studies because it emphasizes the physiological roots of approach and avoidance motivation as temperaments. Despite the relevance of RST to approach and avoidance motivational processes, research on the implications of BAS and BIS for individual's emotional and attitudinal outcomes has been largely inconclusive. Elliot and Thrash (2002) showed that those with high BAS versus high BIS adopted different daily goals. For example, college students with high BAS were more likely to adopt approach goals of doing better compared to others; whereas those with high BIS were more likely to adopt avoidance goals of not doing poorly compared to others. In contrast, Updegraff et al. (2004) found that individuals with high BAS reported a greater number of positive experiences and higher well-being in their daily lives compared to those with low BAS, but they did not find a corresponding pattern of results for BIS. Different yet, Richard and Diefendorff (2011) demonstrated that individuals with high BIS showed greater sensitivity toward positive mood during upward goal revision, but they did not find a corresponding effect for individuals with high BAS. Instead, there was no relationship for negative mood during downward goal revision for those with high BAS.

Given the complexity of the above findings, the current study takes a more focused approach toward understanding BAS and BIS. Although BIS has been conceptualized and measured as one uni-dimensional concept, Carver and White (1994) differentiated three subdimensions of BAS. Overall, BAS is conceptualized as one's general sensitivity to rewards, with three sub-dimensions: BAS-Drive, BAS-Fun Seeking, and BAS-Rewards. BAS-Drive is defined as one's diligence and persistence in goal pursuit. BAS-Fun Seeking is defined as one's desire for new rewards and eagerness to pursue potentially rewarding goals on the spur of the moment. BAS-Rewards is defined as one's positive responses to occurrence or anticipation of rewards. Carver and White as well as Carver (2004) provided empirical support for distinctions between the three sub-dimensions, and called for future research on specific sub-dimensions.

Research shows that aggregating multidimensional constructs can introduce confounds and weaken relationships (Carver 2004; Zinbarg and Mohlman 1998). Thus, we designed our research to focus specifically on the reward sensitivity sub-dimension of BAS. This is because reward sensitivity has the most direct salience for approach regulatory fit—especially in a laboratory experiment in a University setting. Restated, general drive and fun-seeking have less immediate relevance to the notion of fit between type of goal (approach-avoidance) and type of strategy (approach-avoidance) as predictors of satisfaction in a class-related psychology experiment.

Those who are high on the BAS-Reward sub-dimension (BAS-R) should have especially positive responses when they use approach strategies for gaining rewards (Carver 2004). Thus, we posit that individual differences in reward sensitivity approach temperament (BAS-R) and individual differences in avoidance temperament (BIS) will influence responses to approach and avoidance goals and strategies. In sum, the current study makes a unique contribution to the literature by (1) examining the effect of approach and avoidance regulatory fit on individuals' satisfaction, and (2) exploring the effects of individual differences in approach and avoidance temperaments on satisfaction. In the next section we describe our experimental design.

## **The present experiment**

The current study proposed that approach and avoidance regulatory fit would increase satisfaction compared to lack of fit between goals and strategies. Prior research has used tower building tasks to test fit predictions—Faddegon et al. (2009) so we similarly used a tower building task. In contrast to prior research, we experimentally induced approach and avoidance fit. Each participant was randomly assigned to either the approach or avoidance goal condition. In the approach condition, the goal was to build towers that were taller than 50 % of all other towers. In the avoidance condition, the goal was to avoid building towers that were shorter than 50 % of all other towers.

To manipulate approach and avoidance fit, we had participants use approach-oriented strategies for one round of tower building and avoidance-oriented strategies for the other round of tower building. We counter-balanced the order of the strategies within person to control for order effects. Following the examples of Friedman and Förster (2000) and Förster et al. (2006), the approach strategy involved creative thinking and the avoidance strategy involved systematic thinking. Specifically, for the approach strategy, participants were told to generate new ideas and come up with novel suggestions for building towers. For the avoidance strategy, participants were told to pay careful attention to specific rules for building towers. Since each participant experienced fit (either approach fit or avoidance fit) and the absence of fit (mismatched goals and strategies), we expected them to experience higher satisfaction in the fit conditions (approach goal and approach strategy or avoidance goal and avoidance strategy). To expand the scope of our research question and the contribution of our study, we also considered the role of individual temperaments based on Reinforcement Sensitivity Theory (Gray 1990) as predictors of satisfaction.

## **Method**

### *Participants*

The participants consisted of 150 undergraduate students at a large Midwestern university where students received course credit for their participation. Three participants did not complete the study or failed to follow instructions and were dropped from the analyses, resulting in a total of 147 participants for data analysis. Females constituted 56 % of the participants; 77 % were White; and 81 % were age 18–21.

### *Procedure*

Immediately after signing up for the study (approximately 1 week prior to the experiment), participants completed questionnaires on BIS, BAS-R, and demographic characteristics. In the lab, they were randomly assigned to either the approach or avoidance goal condition. In both conditions, the task was “building towers.” Participants were also randomly assigned to dyads and told that they would build towers together for two rounds. Each person was assigned a different strategy for each round. Participants were told that those who achieved their goals would be entered into a lottery where ten pairs would be randomly selected to receive \$20 at the end of the semester. To enhance participant engagement, we started with a brief slide presentation on famous towers throughout the world.

In the approach condition, the goal was to build towers that were taller than 50 % of all other towers. In the avoidance condition, the goal was to avoid building towers that were shorter than 50 % of all other towers. When building towers together, each participant used a different strategy to achieve the goal. Specifically, while building the first tower, person A focused on generating new ideas and coming up with novel suggestions while person B focused on careful application of tower construction guidelines to make sure they did not break any rules. When dyads built the second tower, they switched strategies (generating new ideas, carefully following rules) but continued working toward the same assigned goal (either approach or avoidance). Therefore, the goal condition was between individuals and the strategy condition was within individuals.<sup>1</sup>

Before each round, researchers distributed tower building materials and a set of five rules for building the towers. Participant individually wrote down their own goal and rated their goal commitment at the beginning of each round using Klein et al. (2001) five-item scale. They then had 2 min to write down their assigned strategy and how they would work toward their goal. Each tower building round lasted 10 min. Participants rated their satisfaction at the end of each round and rated their partner's effectiveness in showing their assigned strategies. Experimenters measured the height of the towers at the end of each round. At the end of round two, participants were fully debriefed and thanked. Each session lasted 90 min and included 10–20 participants.

### *Manipulation checks*

Analysis of the goals and strategies participants wrote down at the beginning of each round showed that all but one participant correctly identified their assigned goal and all participants correctly described their assigned strategy. At the end of each round, participants rated their partner's use of their assigned strategy (1 = not at all; 5 = very frequently). The average ratings were high for both approach ( $M = 4.3$ ,  $SD = .53$ ) and avoidance ( $M = 4.3$ ,  $SD = .59$ ) strategy compliance indicating that participants used their assigned strategies during tower building. Finally, t test analyses demonstrated no significant differences in goal commitment across the two goal conditions for approach strategy ( $t = -.92$ ;  $p = .36$ ) or avoidance strategy ( $t = -1.03$ ;  $p = .30$ ).

### *Measures*

#### **Behavioral activation and inhibition**

We assessed approach and avoidance dispositional tendencies with Carver and White's (1994) BAS-R (5 items) and BIS (7 items) based on a 7 point Likert scale that ranged from (1) Strongly Disagree to (7) Strongly Agree. The reliability for BAS-R was .82 and the average was 5.85 ( $SD = .74$ ). The reliability for BIS was .79 and the average was 4.38 ( $SD = .92$ ).

#### **Satisfaction**

After each round, participants rated their satisfaction with three items adapted from Tsui et al. (1992: 1 = extremely dissatisfied; 7 = extremely satisfied): All in all, how satisfied are you with your performance on the task; How satisfied are you with the progress you made in building the first (second) tower; Considering the effort you put into your strategy, how satisfied are you with your performance? The reliability for satisfaction for those using the approach strategy was .81 and the average was 5.38 ( $SD = 1.43$ ). The reliability for satisfaction for those using the avoidance strategy was .79 and the average was 5.47 ( $SD = 1.34$ ).



## Analyses

Since research demonstrates that satisfaction is related to performance (Judge et al. 2001), we entered tower height (e.g., task performance) as a control variable to eliminate effects of task performance in all analyses.

Given that participants worked in dyads and rated their satisfaction after each of the two rounds, it is important to recognize lack of independence in the satisfaction ratings. For example, because two individuals worked together, their satisfaction ratings should be more similar to each other than to satisfaction ratings of those in other dyads. In traditional linear regression models, significance tests depend heavily on the number of independent observations. Thus, lack of independence in our data could inflate Type 1 error and make the significance tests too liberal (Barcikowski 1981). Accordingly, we used random coefficient regression analysis, which accounts for lack of independence due to working in dyads as well as repeated assessment over time (Bryk and Raudenbush 1992). Results include parameter estimates ( $\gamma$ ) which are functionally equivalent to unstandardized regression coefficients and represent the relationship between the independent and dependent variables after accounting for dyad membership and repeated assessments.

## Results

The main hypothesis of the current study predicted higher satisfaction in the matched conditions of regulatory fit where participants used an approach strategy with an approach goal or where they used an avoidance strategy with an avoidance goal. Thus, we expected that the interaction between type of goal and type of strategy would predict satisfaction. Table 1 2 presents HLM results for the between-person effects of approach and avoidance regulatory fit using data from the first round.

Table 1: HLM analyses of between-person effects of approach and avoidance regulatory fit (goal condition  $\times$  strategy) on satisfaction

	$\gamma^d$	SE	<i>t</i> value
Step 1 (control)			
Tower height <sup>a</sup>	.01	.02	.83
Step 2			
Goal <sup>b</sup>	-.21	.27	-.77
Strategy <sup>c</sup>	.01	.23	.02
Step 3			
Goal $\times$ strategy	.93	.45	2.02*

- a. Control variable
- b. 1 = approach condition, 2 = avoidance condition
- c. 1 = approach strategy, 2 = avoidance strategy
- d.  $\gamma$  = regression weight

\*  $p < .05$ ; \*\*  $p < .01$

In step 1, we entered tower height to control for performance effects. In step 2, we entered main effects, such that satisfaction was regressed on the between-person goal condition and between-person type of strategy. In step 3, we entered the interaction of goal condition and type of strategy. As expected, there were no main effects, indicating that neither type of goal nor type of strategy alone explained significant variance in satisfaction. Instead, consistent with our predictions based on approach and avoidance regulatory fit, the interaction between type of goal and type of strategy was significant ( $\gamma = .93$ ;  $p < .05$ ). As illustrated in Fig. 1, the pattern of relationships showed significant effects for fit—such that individuals who pursued approach goals using approach strategies ( $M = 5.70$ ) and individuals who pursued avoidance goals using avoidance strategies ( $M = 5.47$ ) had greater satisfaction than individuals pursuing approach goals using avoidance strategies ( $M = 5.17$ ) or individuals pursuing avoidance goals using approach strategies ( $M = 4.96$ ).

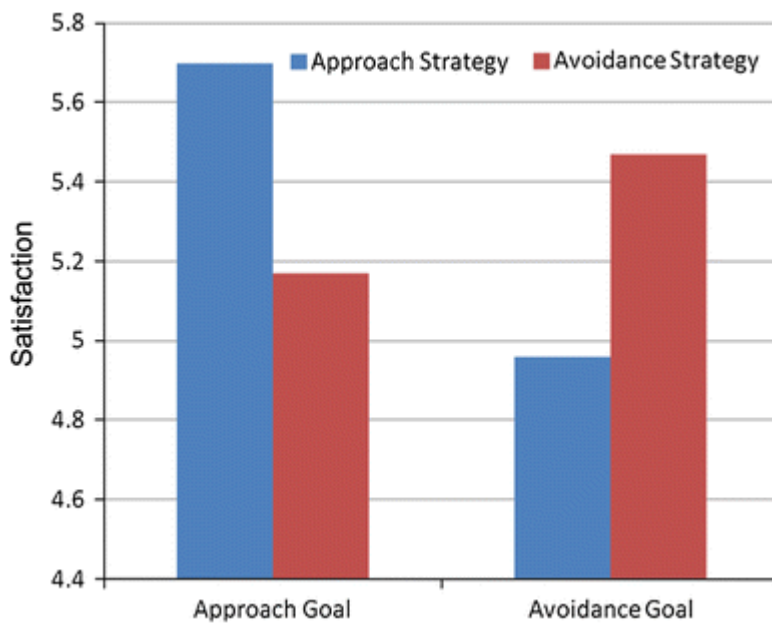


Fig. 1: Effect of approach and avoidance regulatory fit between goal and strategy on satisfaction (between-person effect)

Table 2 presents the HLM results for the within-person effects of approach and avoidance regulatory fit by comparing satisfaction when using approach versus avoidance strategies (within-person factor) in the approach or avoidance goal conditions (between-person factor). These analyses are based on those in the approach goal condition who sequentially used approach and avoidance strategies (counter-balanced for order effects) and those in the avoidance condition who sequentially used approach and avoidance strategies (also counter-balanced).

Table 2: HLM analyses of within-person effects of approach and avoidance regulatory fit (goal condition  $\times$  strategy) on satisfaction

	$\gamma^d$	SE	<i>t</i> value
Step 1 (control)			
Tower height <sup>a</sup>	.02	.01	1.75
Step 2			
Goal <sup>b</sup>	-.02	.20	-.13
Strategy <sup>c</sup>	.03	.15	.20
Step 3			
Goal $\times$ strategy	.93	.30	3.02**

- a. Control variable
- b. 1 = approach condition, 2 = avoidance condition
- c. 1 = approach strategy, 2 = avoidance strategy
- d.  $\gamma$  = regression weight

\*  $p < .05$ ; \*\*  $p < .01$

We controlled for tower height in step 1 to account for possible performance effects. We then entered main effects in step 2, such that satisfaction was regressed on the between-person goal condition and on the within-person type of strategy. In step 3, we entered the goal condition  $\times$  type of strategy interaction. Again, as expected, there were no main effects. Neither type of goal nor type of strategy alone explained significant variance in satisfaction. Consistent with our predictions based on approach and avoidance regulatory fit, the interaction between type of goal and type of strategy was significant ( $\gamma = .93$ ;  $p < .01$ ). Figure 2 illustrates this interaction and supports the predicted pattern of regulatory fit effects on satisfaction. In the approach goal condition, participants had higher satisfaction using the approach strategy ( $M = 5.75$ ) compared to avoidance strategy ( $M = 5.25$ ). In the avoidance goal condition, participants had higher satisfaction using the avoidance strategy ( $M = 5.64$ ) compared to approach strategy ( $M = 5.14$ ).

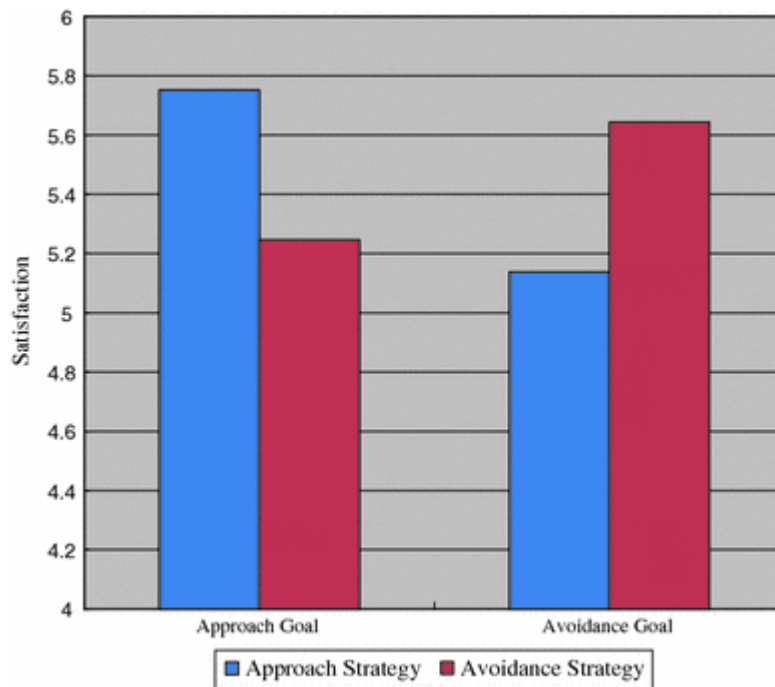


Fig. 2: Effect of approach and avoidance regulatory fit between goal and strategy on satisfaction (within-person effect)

The current study also examined the interactions of type of goal and type of strategy with individual differences in approach/avoidance temperaments as predictors of satisfaction. Table 3 reports results of the analysis. In Step 1, we entered tower height as a control. We then entered the main effects of goal condition, type of strategy, and temperaments (BAS-R and BIS) in Step 2. Results show no significant main effects. In step 3, we entered six two-way interactions. Consistent with the between-person results reported in Table 1 and the within-person results reported in Table 2, the interaction between goal and strategy was significant ( $\gamma = 1.25, p < .01$ ). In addition, results show two other significant interactions: one involving BAS-R and the other involving BIS. First, there was a significant interaction effect between BAS-R and goal condition predicting satisfaction ( $\gamma = .58, p < .01$ ). As illustrated in Fig. 3 the level of BAS-R did not make a difference in satisfaction for those who were pursuing approach goals. In contrast, satisfaction was higher for those with high levels of BAS-R who were pursuing avoidance goals (than for those with low BAS-R). In sum, BAS-R acted as a buffer and prevents people from feeling low satisfaction when pursuing avoidance goals. Second, there was a significant interaction effect between BIS and strategy ( $\gamma = .63, p < .01$ ). Figure 4 shows that the level of BIS makes more of a difference in satisfaction when using avoidance strategies, such that satisfaction was higher for those with high levels of BIS using avoidance strategies (than for those with low BIS). In contrast, the level of BIS made less of a difference in satisfaction for those using approach strategies.

Table 3: HLM analyses of BAS/BIS and regulatory fit (goal condition × strategy) on satisfaction

	$\gamma^e$	SE	<i>t</i> value
Step 1 (control)			
Tower height <sup>a</sup>	.02	.01	1.75
Step 2			
Goal <sup>b</sup>	-.06	.21	.27
Strategy <sup>c</sup>	.00	.16	.00
BAS-R <sup>d</sup>	.09	.11	.78
BIS	.05	.10	.45
Step 3			
Goal × strategy	1.25	.32	3.88**
Goal × BAS-R	.58	.26	2.22**
Strategy × BAS-R	-.06	.21	-.29
Goal × BIS	.06	.19	.29
Strategy × BIS	.63	.18	3.36**
BAS-R × BIS	-.03	.12	-.22

- a. Control variable
- b. 1 = approach condition, 2 = avoidance condition
- c. 1 = approach strategy, 2 = avoidance strategy
- d.  $\gamma$  = regression weight

\*  $p < .05$ ; \*\*  $p < .01$

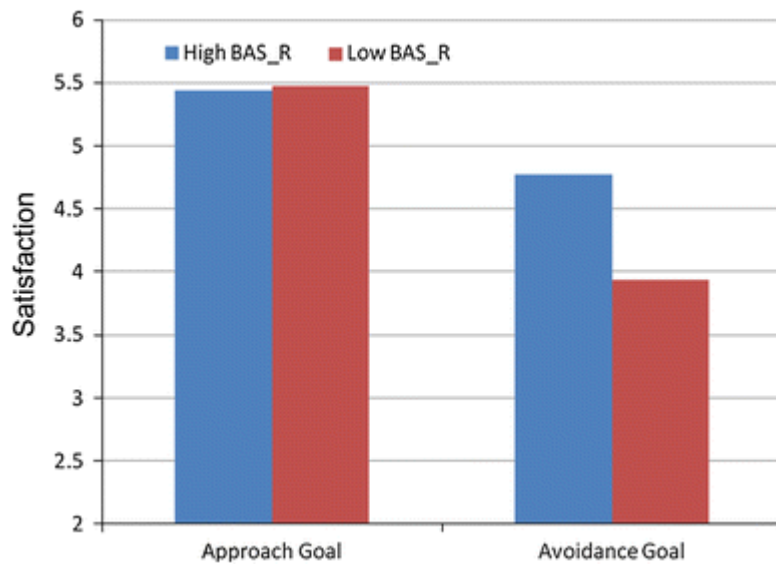


Fig. 3: Two-way interaction effect of BAS-reward sensitivity on satisfaction

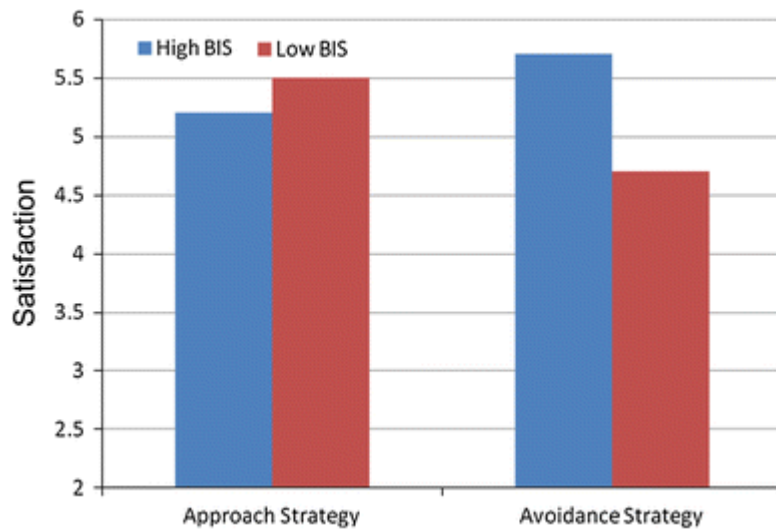


Fig. 4: Two-way interaction effect of BIS on satisfaction

## Discussion

The current study took the novel approach of examining individual satisfaction from goal pursuit based on approach and avoidance regulatory fit. While previous studies have focused on the main effects of pursuing approach and avoidance goals on satisfaction, no research has examined the effect of regulatory fit between approach and avoidance goals and strategies on individual satisfaction. Thus, our research responds to Elliot et al. (2001) call for research on factors that moderate the effects of pursuing approach versus avoidance goals on satisfaction and enhances the understanding of the processes of goal pursuit. In the current study, we experimentally induced approach and avoidance regulatory fit and demonstrated that both approach regulatory fit and avoidance regulatory fit led to greater satisfaction than mis-matched conditions that mixed approach with avoidance or vice versa. Specifically, those in the approach goal condition using an approach strategy reported greater satisfaction. Likewise, those in the avoidance goal condition using an avoidance

strategy reported greater satisfaction. This is the first study to manipulate approach and avoidance regulatory fit and demonstrate these effects. The current study also supported both between-subject and within-subjects effects of approach and avoidance regulatory fit. Finally, these findings support the generalizability of regulatory fit theory to approach and avoidance motivational orientations.

This research also explored the relationships between individuals' approach and avoidance motivational temperaments and satisfaction involving approach and avoidance goals and strategies. Results showed that BAS-R moderated the effects of type of goal on individual's satisfaction, such that high BAS-R protected participants from low satisfaction when pursuing avoidance goals. This finding supports Updegraff et al. (2004) observation that high BAS individuals seek positive cues in potentially adverse situations and show resilience in their sense of well-being. In contrast, BIS moderated the effects of type of strategy on individual's satisfaction. Those with high BIS had higher satisfaction when they used avoidance strategies. This finding supports Gray's (1990) point that those with high BIS are sensitive to negative outcomes and naturally experience a sense of satisfaction when they engage in avoidance behaviors.

Unfortunately, there was no consistency in the interactions of BAS-R and BIS with approach and avoidance motivations. Instead, BAS-R interacted with type of goal, and BIS interacted with type of strategy. Thus, our research, like that of previous studies involving BAS and BIS, suggests that BAS and BIS processes are not parallel and should be the subject of ongoing research. We recommend future studies of differential motivational processes involving diverse individual dispositional differences such as chronic promotion and prevention focus and their effects on the subjective experience of regulatory fit. There is still much to be learned about the boundary conditions that explain when regulatory fit enhances satisfaction and when it detracts from satisfaction.

In sum, the current study took a novel perspective for gaining increased understanding of predictors of satisfaction based on pursuing approach and avoidance goals. Using regulatory fit theory, the current study predicted and demonstrated positive effects of both approach fit and avoidance fit in goals and strategies as predictors of satisfaction. We also explored the moderating role of BAS-R and BIS as individual differences in temperament in predicting satisfaction. While the interaction pattern of BAS-R and BIS with approach and avoidance goals and strategies showed interesting relationships with satisfaction, more research is needed to illuminate the interplay between individual dispositional tendencies and satisfaction during goal pursuit.

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## Footnotes

1 We included both within and between factors to strengthen the design and to acknowledge the importance of distinguishing within and between effects relative to dispositional tendencies (Gable et al. 2000). The within-subjects factor (two sequentially assigned strategies) decreased error variance due to potential confounds across individuals and also increased statistical power (Keppel 1991). We statistically controlled for the effect of being in the same dyad by using hierarchical linear modeling (HLM) analysis (Bryk and Raudenbush 1992).

2 Each participant was assigned to either the approach or avoidance goal condition and was asked to report their satisfaction using approach and avoidance strategies. Half of the participants used approach strategies for the first round then avoidance strategies for the second round; while the other half of the participants used avoidance strategies for the first round and approach strategies for the second round. Analyzing results from the first round assesses between-person regulatory fit effects. We thank the editor and anonymous reviewers for suggesting that we include this between-person test of regulatory fit.