

#### ORIGINAL RESEARCH

# Regulatory Focus and Financial Satisfaction: The Sequential Mediating Roles of Construal Level and Opportunity Cost Consideration Among College **Students**

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Background: Recently, the importance of individual differences has been recognized in the literature of general life satisfaction and domain-specific satisfaction, however, empirical research exploring the relationship between individual differences in self-regulatory focus and financial satisfaction remains relatively sparse, and less is known about the underlying processes that may mediate this relationship. The current study addressed these gaps by investigating whether and how self-regulatory focus (promotion vs prevention) as a motivational trait is related to college students' financial satisfaction. A model was tested in which this association was sequentially mediated by the effects of construal level and opportunity cost consideration.

Methods: A total of 552 college students (38.6% male; ages 19-25) completed a packet of questionnaires that measured trait regulatory focus, construal level, opportunity cost consideration, and financial satisfaction.

Results: The mediation model was tested via multiple regression analyses and bootstrapping procedure. The results supported a sequential mediation model, suggesting that predominantly promotion-focused regulation is associated with information construal at a more abstract level, increasing the consideration of opportunity costs, and subsequently enhancing financial satisfaction.

Discussion: These findings can broaden our understanding of how trait regulatory focus potentially influences financial satisfaction, offering new directions towards improving college students' financial satisfaction.

**Keywords:** regulatory focus, construal level, opportunity cost consideration, financial satisfaction, sequential mediation model

## Introduction

With the complexity and importance of personal finance, many people are concerned about managing their own financial matters and pursuing higher financial and overall well-being. 1,2 College students are no exception. College students are at the beginning of emerging adulthood, and although, on the one hand, they desire autonomy, and on the other hand, they still need their parents' financial support for their studies.<sup>3</sup> A recent large-scale study of 1334 college students from seven universities in China reported that approximately half of the students were not satisfied with their financial situation.<sup>4</sup> Driven by practical concern and social attention, researchers have focused on how emerging adults, especially college students, can achieve higher satisfaction with their current financial state.<sup>2,5</sup>

Financial satisfaction refers to a person's subjective evaluation of their current financial condition. <sup>6,7</sup> Previous studies have focused on emerging adults' objective financial status, eg, household income; financial behavior, eg, saving money, holding student loan debt; 10 financial capacity, eg, financial literacy, financial efficacy; 11 and financial socialization, eg, family financial expectations; 12 in relation to their financial satisfaction. Although recently the importance of individual differences has been recognized in the literature of financial well-being, empirical research exploring the relationship between individual

differences and financial satisfaction remains relatively sparse. 1,2 The current study addresses this gap by testing selfregulation as a psychological characteristic that potentially affects financial satisfaction.

## Trait Regulatory Focus and Financial Satisfaction

There remains a dearth of research examining the relationship between self-regulatory focus and financial satisfaction. Self-regulatory focus theory posits two distinct but coexisting foci of self-regulation, namely promotion focus and prevention focus. 13,14 Although promotion- and prevention-focused motivations coexist within each person, people differ in their predominant self-regulatory focus. People with a predominant promotion focus (the net difference between promotion and prevention) are likely to strive for enhancement, growth, and advancement, adopt an approach orientation, and view difficult tasks as opportunities to demonstrate their coping abilities and achieve domain-specific and life success. People with a predominant prevention focus are likely to strive for safety and responsibility, avoid actions that could lead to negative consequences, and view difficult tasks as an obligation, or even as a barrier to ensuring security and fulfilling duties. 15,16 Self-regulatory focus can be considered a stable trait or a temporary situational state. 14 In the current study, we conceptualized self-regulatory focus as a relatively stable motivational system or personality trait. Selfregulatory focus has been increasingly used to explain the subjective evaluation of general life satisfaction and domainspecific satisfaction. For example, in studies on general life satisfaction, promotion-focused people reported better quality of life and greater life satisfaction than prevention-focused people. 17-19 With respect to domain-specific satisfaction, promotion- versus prevention-focused people reported stronger satisfaction with their job, <sup>16</sup> romantic relationships, <sup>20,21</sup> and friendships.<sup>22</sup> These studies suggest the positive role of predominance in trait promotion focus in the aforementioned relationships. It is surprising that little is known about the possible links between trait regulatory focus and financial satisfaction. To address this gap, the current study investigated whether evidence of positive association between predominant promotion focus and domain-specific satisfaction extends to the finance domain, contributing a more complete picture of the impact of self-regulatory focus on domain-specific satisfaction. We therefore propose the following hypothesis:

Hypothesis 1: Predominant promotion focus is positively correlated with financial satisfaction.

# The Mediating Role of Construal Level

The distal-proximal theory argues that as the preexisting characteristics of individuals, personality traits serve distal motivational functions and have their indirect effects, while information processing and decision-making processing have more proximal influences. 23-25 We suspect that construal level is a proximal information processing construct that mediates the distal effects of trait regulatory focus on financial satisfaction. According to construal level theory, this concept is the degree of abstraction by which people process information.<sup>26</sup> People differ in their construal level. Individuals with low construal level construe their environment in a concrete way, and produce subordinate representations. By contrast, individuals with high construal level construe their environment in an abstract way, and produce superordinate representations. For example, if asked to describe the act of reading, the person with low construal level might say "following lines of print", whereas the person with high construal level might say "gaining knowledge".

Evidence of an association between trait regulatory focus and construal level remains scarce and somewhat inconsistent. For example, in the study of Pennington and Roese, 27 trait promotion focus was positively correlated with construal level for future judgments, whereas, for retrospective judgments, trait promotion focus was uncorrelated with construal level. Nevertheless, scholars have argued that considering the role of trait regulatory focus could contribute to a more comprehensive understanding of the relationship between regulatory focus and construal level. 14,28 Although no studies have directly investigated the mediating role of construal level in the relationship between trait regulatory focus and financial satisfaction, there is indirect evidence concerning the first link (trait regulatory focus → construal level) that would suggest the possibility of such a mediation model. In two experiments, researchers manipulated self-regulatory goal orientation and assessed participants' construal level. Participants who were primed with a promotion focus subsequently construed information at a higher level than those who were primed with a prevention focus.<sup>29,30</sup>

There is also indirect evidence of the second link in the proposed mediation process (construal level  $\rightarrow$  financial satisfaction). Specifically, construal level has been shown to be associated with general satisfaction, which presumably includes financial satisfaction. For example, people with high versus low construal levels focused more on the positives and pro arguments in considering a course of action,<sup>31</sup> reported less discomfort when experiencing mixed emotions and evaluated their mixed emotions more favorably,<sup>32</sup> had a better ability to cope with mixed emotions,<sup>33</sup> and reported higher life satisfaction.<sup>33</sup>

Research on the finance domain has shown that construal level is associated with healthy financial behaviors, which may improve financial satisfaction. For example, when saving goals were specified, people with a high construal level reported higher anticipated success, committed more to the goals, and had higher actual saving than people with a low construal level.<sup>34</sup> In addition, a number of studies have shown that people with a higher tendency to plan for long-term goals (the core characteristic of high-level construal) had higher financial satisfaction.<sup>35–38</sup> Thus, it is plausible that individuals with high construal level would be more satisfied with their financial situation.

Based on this review of the literature, we propose the following hypothesis:

Hypothesis 2: Predominant promotion focus is positively correlated with construal level, which in turn is positively correlated with financial satisfaction. In other words, construal level mediates the relationship between predominant regulatory focus and financial satisfaction.

## The Mediating Role of Opportunity Cost Consideration

Opportunity cost consideration may serve as a proximal information processing construct that mediates the distal effects of trait regulatory focus on financial satisfaction. Green's (1894) economic concept of opportunity cost has been applied in the research fields of psychology and marketing.<sup>39</sup> People have unlimited wants but limited resources, requiring them to choose which wants will be fulfilled. Choosing something means forgoing something else. The opportunity cost of one option is "the evaluation placed on the most highly valued of the rejected alternatives or opportunities".<sup>40</sup> Opportunity cost is resource-specific. In the current study, opportunity cost consideration is defined as considering alternative uses for one's money.

Trait regulatory focus appears to be a motivational antecedent of opportunity cost consideration. This possibility is relevant to the first link of mediation (trait regulatory focus → opportunity cost consideration). In several studies, prevention-focused (vs promotion-focused) individuals were more prone to anticipate regret<sup>41</sup> and to experience regret,<sup>42</sup> and were more likely to avoid regret.<sup>43</sup> People with prevention focus might be more likely to ignore opportunity costs because there is an aversion to regret,<sup>44,45</sup> creating an incentive to avoid information about foregone outcomes.<sup>44,46</sup> In contrast, promotion-focused (vs prevention-focused) individuals had a higher tendency to maximize their opportunities and gains.<sup>43</sup> The promotion-focused decision-making style that maximizes utility might help people seize opportunities and hence increase their consideration of alternative uses of their resources.

Opportunity cost consideration may also promote healthy financial behaviors. This possibility is relevant to the second link of the mediation process (opportunity cost → financial satisfaction). In the experiments of Hershfield, Goldstein, Sharpe, Fox, Yeykelis, Carstensen and Bailenson, <sup>47</sup> participants whose attention was explicitly directed to future consequences were more likely to accept later monetary rewards over immediate ones. Individuals with a higher tendency to elaborate on potential outcomes invested more money for their retirement. <sup>48</sup> Bartels and Urminsky <sup>49</sup> reported that participants with a higher sense of psychological connectedness to the future self had a lower purchase intents only when the opportunity cost was chronically salient (for people with a high propensity to plan) or situationally salient (an opportunity cost cue was presented). In light of the robust relationship between healthy financial behaviors and financial satisfaction, it is reasonable to assume that opportunity cost consideration improves financial satisfaction.

Based on the literature reviewed above, we propose the following hypothesis:

Hypothesis 3: Predominant promotion focus is positively correlated with opportunity cost consideration, which in turn is positively correlated with financial satisfaction. In other words, opportunity cost consideration mediates the relationship between predominant regulatory focus and financial satisfaction.

## The Relationship Between Construal Level and Opportunity Cost Consideration

As discussed above, construal level and opportunity cost consideration each contribute to financial satisfaction, and there is indirect evidence that they may each mediate the association between trait regulatory focus and financial satisfaction. However, not much is known about the relationship between these two mediators. According to construal level theory, high levels of construal drive attention to the general meaning of the action.<sup>26</sup> In one recent experiment, participants who were manipulated to derive meanings from their choice had greater consideration of other ways to use money than control participants who were manipulated to derive pleasure from their choice.<sup>50</sup> Taken together, it suggests that construal level may predict later consideration of opportunity cost. This further suggests the possibility that construal level and opportunity cost consideration may be sequential mediators of the association between trait regulatory focus and financial satisfaction. We thus propose the following hypothesis:

Hypothesis 4: Construal level and opportunity cost consideration sequentially mediate the relationship between predominant regulatory focus and financial satisfaction.

## The Present Study

The present study tested a potential underlying mechanism of the relationship between trait regulatory focus and financial satisfaction. A sequential mediation model was tested in which this association was mediated by construal level and opportunity cost consideration.

## **Methods**

## Sample

A cross-sectional design with convenience sampling was used. This study was approved by the Ethics Committee of Guangdong University of Finance. Participants were recruited from two universities in Guangdong Province, China, all of whom volunteered to complete an online survey. The sample size was estimated using G-power 3.1. For linear multiple regression, the minimum required number of participants was 550, based on an  $\alpha$  level of 0.05, power (1- $\beta$ ) of 0.80, effect size ( $f^2$ ) of 0.02, three predictors, and three covariates.<sup>7,51</sup> There were 552 participants (38.6% male) who completed the anonymous questionnaires. The average age of participants was 19.30 (SD = 1.45).

### Measures

#### Trait Regulatory Focus

Participants' trait regulatory focus was assessed by the Regulatory Focus Questionnaire (RFQ; Semin, Higgins, De Montes, Estourget and Valencia<sup>52</sup> using the Chinese translated version (Yang et al).<sup>53</sup> The RFQ contains two subscales, with six items for promotion focus and prevention focus, respectively. A representative item in the promotion focus subscale is "I try to reach that in my life, in which I believe." A representative item in the prevention focus subscale is "Not being careful enough has gotten me into trouble at times." Participants rated each item on a 7-point Likert type scale from 1 (not at all true) to 7 (absolutely true). Cronbach's α coefficients of 0.842 (promotion focus) and 0.733 (prevention focus) indicated good internal reliability for the RFQ in the present study. To test our hypotheses, following previous research, <sup>54,55</sup> predominant regulatory focus was calculated by subtracting the mean prevention focus score from the mean promotion focus score. Higher positive scores indicate relatively greater trait promotion than prevention focus; higher negative scores indicate relatively greater trait prevention focus.

#### Construal Level

Participants' construal level was measured by the Behavioral Identification Form (BIF),<sup>56</sup> using the Chinese translated version.<sup>57</sup> The BIF lists 25 behaviors and activities (eg, reading), with a concrete description (eg, following lines of print) and an abstract description (eg, gaining knowledge). Participants were asked to choose the description that they thought best matched the behavior. Participants' responses (concrete answers were coded as 0, whereas abstract answers were coded as 1) were averaged to provide a BIF score. Higher BIF scores indicate higher construal levels. The Cronbach's  $\alpha$  coefficient for the present sample was 0.748.

#### Opportunity Cost Consideration

Participants' opportunity cost consideration was measured by a three-item scale of opportunity cost consideration. A representative item is "I often consider other specific items that I would not be able to buy if I made a particular purchase." The items were forward- and back-translated by two independent bilinguals. Participants indicated their degree of agreement with each item using a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). The mean scores were computed, with higher scores indicating greater opportunity cost consideration. The Cronbach's  $\alpha$  coefficient for the present sample was 0.704.

#### Financial Satisfaction

Participants' financial satisfaction was measured by a five-item scale of financial satisfaction. <sup>59</sup> A representative item is "Compared to my financial position last year, my financial position this year is \_\_\_\_." Participants indicated their position using a seven-point scale ranging from 1 (much worse) to 7 (much better). The mean scores were computed, with higher scores indicating greater financial satisfaction. The Cronbach's  $\alpha$  coefficient for the present sample was 0.894.

#### Control Variables

We control for basic socio-demographic variables (age, gender and monthly living expenses). Participants were required to indicate their monthly pocket money on a five-point scale ranging from 1 (less than 500 yuan) to 5 (more than 2000 yuan).

## Data Analysis

Data were analyzed using IBM SPSS version 22. First, descriptive statistics (eg, M, SD) and bivariate correlations for major variables were calculated. Because all data were collected using self-report questionnaires at one time point, Harman's single-factor test was conducted to check for common method variance. Second, a linear regression was employed to test Hypothesis 1. The Model 6 in the SPSS PROCESS Macro was employed to test Hypotheses 2–4. The 95% confidence interval (CI) for the indirect effect was a bias-corrected estimate based on 5000 bootstrapping resamples. The mediating effect was considered to be significant at the level of p < 0.05, when the 95% CI did not include zero.

#### Results

# Preliminary Analyses

Means and standard deviations of all the variables along with their inter-correlations are presented in Table 1. Predominant regulatory focus, construal level, and opportunity cost consideration showed significant and positive correlations with financial satisfaction. Predominant regulatory focus and construal level were significantly positively associated with opportunity cost consideration. Predominant regulatory focus was significantly positively associated with construal level. In addition, monthly pocket money was significantly positively associated with financial satisfaction. Meanwhile, Harman's single-factor test showed that the variance accounted for by the first factor was no more than 40% for all the self-report measures, indicating that the common method variance was not a concern in this study.

Table 1 Hears and Standard Deviations of the title Variables thought their Confederations											
Variables	М	SD	1	2	3	4	5	6	7		
I. Age	19.30	1.45	_								
2. Gender	1.61	0.49	-0.03	_							
3. Monthly pocket money	3.19	1.26	-0.15**	-0.03	_						
4. Predominant regulatory focus	1.11	1.30	0.02	0.12**	-0.03	_					
5. Construal level	1.68	0.17	-0.07	-0.11**	-0.06	0.27**	_				
6. Opportunity cost consideration	5.08	1.24	-0.11**	-0.04	-0.01	0.12**	0.16**	_			
7. Financial satisfaction	4.564	1.06	-0.19**	0.01	0.17**	0.12**	0.12**	0.23**	_		

Table I Means and Standard Deviations of All the Variables Along with Their Correlations

**Notes**: N = 552; \*\*p < 0.01.

Predictors Criterion: Financial Satisfaction		Criterion: Construal Level			Criterion: Opportunity Cost Consideration			Criterion: Financial Satisfaction				
	Ь	SE	t	Ь	SE	t	Ь	SE	t	Ь	SE	t
Gender	-0.009	0.085	-0.105	-0.305	0.084	-3.630***	-0.080	0.088	-0.906	0.034	0.084	0.406
Age	-0.169	0.042	-4.054***	-0.073	0.041	-1.780	-0.107	0.043	-2.509*	-0.141	0.041	-3.436***
Monthly pocket money	0.146	0.042	3.502***	-0.065	0.041	-1.593	-0.012	0.042	-0.290	0.154	0.041	3.780***
Predominant regulatory focus	0.117	0.042	2.819**	0.278	0.041	6.791***	0.089	0.044	2.024*	0.074	0.042	1.756
Construal level							0.123	0.044	2.781**	0.065	0.043	1.531
Opportunity cost consideration										0.200	0.041	4.850***

Table 2 Tests of Mediation in the Association Between Predominant Regulatory Focus and Financial Satisfaction

**Notes**: N = 552; \*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001.

0.064

# Mediation Analyses

 $R^2$ 

First, significant correlations were found among predominant regulatory focus, construal level, opportunity cost consideration and financial well-being. These correlations met the statistical requirements for further analysis of the mediating effects of construal level and opportunity cost consideration.<sup>62</sup>

0.098

0.044

0.116

After controlling for both gender, age and monthly pocket money, the results of regression analysis (Table 2) showed that predominant regulatory focus was positively related to financial satisfaction (b = 0.117, p < 0.01). Hypothesis 1 was supported. However, when construal level and opportunity cost consideration were included in the regression equation, the direct effect of predominant regulatory focus on financial satisfaction ceased to be significant (b = 0.074, p > 0.05).

In addition, predominant regulatory focus was positively correlated with construal level (b = 0.278, p < 0.001) and opportunity cost consideration (b = 0.089, p < 0.05); construal level was positively correlated with opportunity cost consideration (b = 0.123, p < 0.01), but not significantly related to financial satisfaction (b = 0.065, p > 0.05); and opportunity cost consideration was positively associated with financial satisfaction (b = 0.200, p < 0.001). Figure 1 shows the path of standardized regression coefficients of the sequential mediation model.

Mediation analysis was conducted using Model 6 of the PROCESS macro in SPSS.<sup>61</sup> Construal level and opportunity cost consideration exerted a full sequential mediating role in the association between predominant regulatory focus and financial satisfaction (Table 3). To be specific, firstly, neither the "predominant regulatory focus—construal level—financial satisfaction" pathway (indirect effect = 0.018, 95% CI = -0.010 to 0.044) nor the "predominant regulatory focus—opportunity cost consideration—financial satisfaction" pathway (indirect effect = 0.018, 95% CI = -0.004 to 0.045) was significant. Hence, construal level and opportunity cost consideration did not individually mediate the link between predominant regulatory focus and financial satisfaction. Thus, Hypothesis 2 and Hypothesis 3 were not

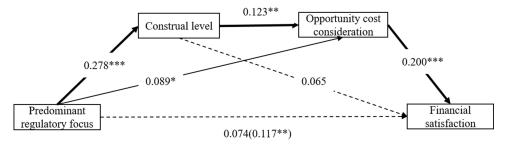


Figure I Effect of predominant regulatory focus on financial satisfaction sequentially via construal level and opportunity cost consideration.

Notes: Solid lines indicate statistically significant associations, whereas dashed lines indicate non-significant associations. \*p<0.05, \*\*p<0.01, \*\*\*p<0.001.

Table 3 Total, Direct, and Indirect Effects of Predominant Regulatory Focus on Financial Satisfaction

	Effect	Standard	95% CI	
		Error	Lower	Upper
Total effect				
Predominant regulatory focus→financial satisfaction	0.117	0.042	0.036	0.199
Direct effect				
Predominant regulatory focus→financial satisfaction	0.074	0.042	-0.009	0.158
Indirect effect				
Predominant regulatory focus→construal level→financial satisfaction	0.018	0.014	-0.010	0.044
Predominant regulatory focus→opportunity cost consideration→financial satisfaction	0.018	0.012	-0.004	0.045
Predominant regulatory focus→construal level→opportunity cost consideration→financial	0.007	0.004	0.001	0.015
satisfaction				

Abbreviation: Cl. confidence interval.

supported. Secondly, the sequential pathway of "predominant regulatory focus—construal level—opportunity cost consideration—financial satisfaction" was significant (indirect effect = 0.007, 95% CI = 0.001 to 0.015). Thus, construal level and opportunity cost consideration sequentially mediated the link between predominant regulatory focus and financial satisfaction, supporting Hypothesis 4.

#### Discussion

The main objective of this study was to investigate the psychological basis for the link between trait regulatory focus and financial satisfaction among college students. We tested construal level and opportunity cost consideration as individual and sequential mediators of this association. When tested individually, neither construal level nor opportunity cost consideration mediated the link between trait regulatory focus and financial satisfaction. However, construal level and opportunity cost consideration were sequential mediators of this association.

The research contributes to the financial satisfaction literature by identifying trait regulatory focus, construal level and opportunity cost consideration as hitherto under-studied but important antecedents of financial satisfaction. The results suggest that opportunity cost consideration may be a driver of the subjective evaluation of one's financial situation. Because the consideration of opportunity cost is thought to occur before final decision-making, <sup>39,63</sup> it makes sense that opportunity cost consideration would play a more proximal role in shaping evaluation than motivational factors (ie, trait regulatory focus) or information processing style (ie, construal level) would do. This sequential mediation model helps us to better understand the ways in which trait regulatory focus and construal level, as distal influences on financial satisfaction, can exert their impact on opportunity cost consideration as a proximal influence.

Further, evidence of a positive link between opportunity cost consideration and financial satisfaction in the current study can be applied to understanding the relationship between opportunity cost consideration and consumer well-being. Previous research showed that opportunity cost consideration increased sensitivity to the value of outside options, thus reducing the likelihood of buying the focal purchases. This may diminish people's short-run satisfaction from consumption. However, greater consideration of alternative uses of one's money may enhance financial satisfaction in the long run. Heightened focus on alternative uses for one's money may encourage people to prioritize some purchases over others, making the best use of their money. Indeed, research suggests that opportunity cost consideration is positively associated with several healthy financial behaviors, such as budgeting, saving money, and delaying discounting, all of which may contribute to people's long-run financial satisfaction. In our own study of college students, this positive link between opportunity cost consideration and financial satisfaction suggests that considering the opportunity cost and making the best use of their limited money may be one of the effective way to manage the conflict between autonomy and financial dependence, then achieving a higher level of financial satisfaction.

Our findings also contribute to the literature on the antecedents of opportunity cost consideration. While this literature has primarily focused on the impact of dispositional differences in spending attitudes, such as being a tightwad<sup>65</sup> and

having a propensity to plan, <sup>58,66</sup> researchers have recently suggested to examine how motivational factors and information processing style affect the consideration of alternative use of the resource, see a review. <sup>39</sup> We extend this literature by demonstrating that trait regulatory focus and construal level affect opportunity cost consideration, in isolation and in concert

In addition, these findings lend further credence to the notion that the accessibility of alternative uses of a resource is an important driver of opportunity cost consideration.<sup>58</sup> The direct positive link between trait regulatory focus and opportunity cost consideration suggests that with the goal orientation of utility maximization, people with high promotion focus may be motivated to search for opportunities and focus their attention on them.<sup>43</sup> This may make it easier to access the alternatives, thus enabling them to give greater consideration to opportunity cost. In addition, the beneficial role of trait regulatory focus on opportunity cost consideration may partly be due to the adoption of high-level construal. Specifically, people with high promotion focus may be more likely to construe information at an abstract, high level. It has been suggested that high construal level is associated with a more flexible and creative information processing style<sup>55</sup> and with more attention to the "big picture".<sup>67</sup> These characteristics may promote awareness of future consequences, the accessibility of an alternative, and consideration of opportunity cost. That is, regulatory focus is a psychological tool that may not per se be associated with opportunity cost consideration, but needs to be used to have a beneficial effect on opportunity cost consideration.

The present study has important practical implications. Our sequential mediation model identified opportunity cost consideration as the more proximal mediator. Interventions should be tailored to help college students bring opportunity cost to bear on consumption decisions. Experimental studies have shown that opportunity costs can be brought to mind by directing people's attention to alternative uses of money beyond the options at hand,<sup>50</sup> even outside the purchase context.<sup>65</sup> However, the heightened consideration of opportunity cost encourages people to choose products that are less expensive, and thus less durable and less environmentally friendly.<sup>50</sup> This consumer behavior can have a negative impact on consumption utility. The seeming tendency of sacrificing quality for quantity points to the danger of understanding opportunity cost in narrow and concrete ways. Given the positive association between construal level and opportunity cost consideration, interventions should be aimed at cultivating abstract construal in the long run. For example, individuals can be encouraged to consider opportunity costs within broader contexts and longer periods. This could help them to develop a bigger picture of possible alternatives and further to link the alternatives to their core values and beliefs. Interventions could promote both satisfactory consumption experiences in the short run and improved financial well-being in the long run.

Despite the relevant theoretical and practical contributions of the present research, it is not without limitations. First, the cross-sectional design does not allow us to draw conclusions regarding causality or directionality. Reciprocal relationships between construal level, opportunity cost consideration and financial satisfaction are possible. For example, individuals who used to consider opportunity cost and make trade-offs may be more likely to develop and adopt a high level of construal. College students who are satisfied with their financial situation may come to perceive trade-offs as more valuable. Thus, it is necessary to use experimental or longitudinal designs to achieve an understanding of the influence of inter-related contributors to financial satisfaction. Second, the self-reported nature of our measures may cause potential bias due to social desirability, selective memory bias, and common method variance. Even though Harman's single-factor test suggested that the common method variance was not a concern in this study, future studies could address this limitation by using multi-method and multi-informant data collection strategies. Third, there might be other mediators (eg, the tendency toward regret, the tendency toward maximization, healthy financial behaviors) and moderators (eg, children's poverty, perceived scarcity) in the relationship between trait regulatory focus and financial satisfaction. Therefore, future studies could examine other factors that mediate and/or moderate the association. Last but not least, convenience sampling may have limited the ability to generalize beyond highly similar groups. Future studies could validate the findings with random sampling to reach a more diverse sample.

## **Conclusions**

Despite the above limitations, this is the first study to investigate the sequential mediating roles of construal level and opportunity cost consideration in the link between trait regulatory focus and financial satisfaction. Findings suggest that people with predominant promotion focus may be more likely to construe information at an abstract, high level, which continues to increase the consideration of alternative uses of their money, and ultimately achieves higher levels of financial satisfaction.

These findings add a new understanding of the mechanisms underlying the pathway between motivational traits and financial satisfaction and provide novel insights for improving college students' financial satisfaction.

## **Data Sharing Statement**

The data that support the findings of this study are available from the corresponding author upon reasonable request.

## **Ethics Approval**

The research was approved by the ethics committee of Guangdong University of Finance.

# **Consent to Participate**

Informed consent was obtained from all adult participants included in the study.

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### **Disclosure**

The authors declare that there is no conflict of interest in this work.

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