Regulatory focus, money attitudes, and financial literacy: evidence from Portuguese young adults

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ABSTRACT

This paper proposes that the type of an individual's motivational forces underlies his/her willingness and ability to acquire financial literacy (FL), whose outcomes ultimately shape consumers' well-being. Specifically, we study the FL of young adults, relying on regulatory focus (RF) theory, which considers two motivational systems, namely a prevention and a promotion system. Using a sample of 682 students from a Portuguese public university we examine the relationship between RF and FL, considering the mediating effect of money attitudes (MA). To test the research hypotheses we rely on structural equation modelling. The results provide support for our predictions. Prevention is negatively related to FL, and promotion is positively related to it. Moreover, prevention positively relates to power-prestige, distrust, and anxiety, and negatively relates to retention-time, whereas promotion is positively associated with retention-time and negatively with distrust. The relationship between RF and FL is partially mediated by MA. Hence, this study tests a number of novel relationships, yielding relevant policy implications.

Keywords: Financial literacy; regulatory focus; money attitudes; young adults

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Introduction

Financial literacy (FL) has been defined as "peoples' ability to process economic information and make informed decisions about financial planning, wealth accumulation, pensions, and debt" (Lusardi and Mitchell 2014, p. 6). Past studies indicate that FL enhances short and long-term positive financial behaviors' (Kim, Anderson and Seay 2018). Despite the mounting efforts put into the understanding of FL and into the development of FL programs (Totenhagen 2015), the current state of the art points to some contradictory findings concerning the efficiency of such initiatives (see Fernandes, Lynch and Netemeyer 2014), and report extremely low FL levels across the world (van Rooij et al. 2011). An explanation for this lies in the underlying motivation of individuals taking part in such initiatives. Mandell and Klein (2007) argue that individuals may not have the motivation to acquire knowledge about personal financial management. Relatedly, in a thorough literature review on youth financial education programs, Totenhagen et al. (2015) concluded that the alignment between delivery methods and young adults' motivation is a key to success. More generally, Pintrich (2003) argues that motivation is central to learning in general. Accordingly, we endorse the contention that motivation is a key driver of FL. Further, we advance upon that assertion by proposing that the type of an individual's motivational forces underlies his/her willingness and ability to learn and retain financial concepts, thus having an important bearing on the acquisition of FL. In this context, we consider individual differences in motivation from a regulatory focus (RF) perspective (Higgins 1997).

RF theory indicates that two different motivational systems regulate goal-directed behaviors (Higgins 2006). The prevention system strives for security and the fulfilment of responsibilities, whereas the promotion system focuses on obtaining nurturance, being oriented towards growth and accomplishment consonant with their ideal state (Higgins et al. 2001). RF theory has been widely applied in studies of consumer behavior (for a review see Motyka et al. 2014). However, the effect of prevention and promotion systems on FL has, thus far, not been explored. This lack of attention to the issue persists despite the evidence that "promotion- and prevention-focused self-regulation has an important impact on judgments, choice, and behavior in economic contexts" (Florack et al. 2013, p. 134).

In investigating the relationship between RF and FL, we consider the mediating effect of money attitudes (MA). Under the conventional economic perspective, money emerged, and serves, to facilitate market transactions, but this account fails to capture "the more emotional, qualitative meanings of money" that crave contemporary society (Belk and Wallendorf 1990, p. 36). Past research indicates that the way students look at money can boost their motivation to look for financial information (Edwards et al. 2007). Previous studies have also observed that stable individual differences determine MA (e.g. Donnelly et al. 2012). This suggests that RF, being a stable individual characteristic, might also influence FL through MA.

The focus of our study is on the FL of young adults, specifically college students. Young adults are under an important developmental period (Shim et al. 2012). They are close to enter the labor market and to gain financial independence from their parents. Following life-cycle theories (Ando and Modigliani 1963), they are likely to borrow soon after entering the labor market, taking advantage of the earning potential obtained from their academic training and their early career stage (Chien and Devaney 2001). They are also developing a number of consumer skills and face unique economic circumstances that condition their financial and consumer mindset (Shim et al. 2012).

Moreover, financial knowledge and attitudes are partly determined by a number of stable psychological characteristics (e.g., Norvilitis and MacLean 2010). This implies that the current psychological make-up of young adults, including their regulatory orientation, should condition their current, as well as future, financial knowledge, attitudes, and behaviors, making them an important research target (Shim et al. 2012). In addition, young adults have a low level of FL (Xiao et al., 2014). Hence, understanding the factors that drive the FL of young people is critical for policymakers, as it can aid in crafting appropriate financial education programs, as well as legislation that protects young consumers (Lusardi et al. 2010).

Accordingly, this study makes three major contributions to existing knowledge. Firstly, it associates RF with FL and MA. Secondly, it investigates whether MA mediate the relationship between RF and FL. And thirdly, it also adds to knowledge by relating MA to FL, an issue that has scarcely been researched.

Research Background

Financial Literacy

Recent research has found that lower levels of financial literacy are positively associated with negative outcomes, such as the use of credit with higher costs (Gathergood 2012), debt loads (Lusardi and Tufano 2015), lower savings (Babiarz and Robb 2014), irresponsible use of credit cards (Robb 2011) and lower participation in the stock market (Thomas and Spataro 2015). Given the important outcomes of FL, past research has made some efforts to uncover its antecedents, namely among young people. Such antecedents include, amongst others, cognitive abilities (Lusardi et al. 2010), educational attainment (Guiso and Japelli 2008), wealth of families (Mandell

2008), money attitudes (Sohn et al. 2012), parental and peer influence (Lusardi et al. 2010). We add to this body of antecedents the role of RF theory.

Regulatory Focus Theory

An important tenet of RF theory is that what matters is not only the value of the outcomes for individuals, but also how individuals approach them (Florack et al. 2013). Accordingly, individuals regulate their behaviors towards desired end-states in different ways. A prevention-focus entails a goal pursuit with strategic means that are avoidance-oriented, whereas a promotion-focus entails a goal pursuit with strategic means that are approach-oriented (Pham and Higgins 2005). An avoidance-orientation means regulating one's behavior so as to avoid negative and undesired outcomes, whereas an approach-orientation involves regulating one's behavior towards positive and desired outcomes (Aaker and Lee 2001). Accordingly, while a prevention focus entails self-regulation towards strong oughts, e.g. fulfilling responsibilities and ensuring safety, a promotion focus involves self-regulation towards strong ideals, e.g. advancement, growth, and accomplishment (Higgins 1997). RF affects the information that individuals attend to, as well as the choices they consider (Florack et al. 2013). Accordingly, we take into account the motivational framework provided by RF theory to investigate individuals' FL. This framework has been frequently used to study varied consumer behaviors (e.g. Pham and Higgins 2005; Zhou and Pham 2004).

Money Attitudes

Past research has observed that MA is an antecedent of a diverse range of consumer behaviors and outcomes, including the risk of suffering negative financial outcomes

(Von Stumm et al. 2013). “Our attitudes and feelings about money integrate themselves into our lives and motivate our behavior in very subtle ways” (Hanley and Wilhelm 1992, p. 9). A popular conceptualization of MA is the one by Yamauchi and Templer (1982), who developed the Money Attitudes Scale (MAS), which distinguishes four dimensions: power-prestige (the extent to which individuals look at money as a signal of power and success); retention-time (individuals’ concern over the goal of future financial security and the preparation towards it); distrust (the extent to which individuals are distrustful and suspicious about situations involving money); and anxiety (the degree to which individuals perceive money as a source of worry and anxiety, as well as a protection from anxiety). MA are influenced by a number of factors. Duh (2016) determined that childhood family experiences affected the MA of young adults (18-25 years), and that such attitudes, in turn, affected their materialism, and Roberts and Jones (2001) that MA were related with compulsive buying in college students. MA are also likely to have an impact upon FL. According to Edwards et al. (2007), MA influence students’ willingness to discuss their financial issues with others. Relatedly, Sohn et al. (2012) found that MA matter for the FL of students. Sohn and colleagues relied on a modified version of Tang’s (1992) Money Ethic Scale, but did not develop specific hypotheses associating MA with FL. Against this, we rely on the MAS, and also put forward arguments for the expected relationships amongst the constructs at play, thereby adding to the literature. Figure 1 exposes our research model.

[INSERT FIGURE 1 ABOUT HERE]

Research Hypotheses

The effects of regulatory focus

Regulatory Focus and Financial Literacy. Under a prevention orientation, the desired end-states of fulfilling responsibilities and duties function as minimal goals (Crowe and Higgins 1997). Given the focus on avoiding negative outcomes, prevention-oriented individuals are inclined towards a strategy that omits alternatives, which leads to a repetitive pattern of behaviors (Crowe and Higgins 1997). Hence, a prevention focus appears to result in a narrower attentional scope (Baas et al. 2008). This should reduce the search for information, namely regarding financial matters, thus curtailing FL. Promotion focus involves a concern with accomplishment and fulfilling hopes (Higgins 1997). Such aspirations and hopes work as maximal goals (Crowe and Higgins 1997), which drive individuals to insure hits and minimize errors of omission (Crowe and Higgins 1997), so as not to lose opportunities. Accordingly, promotion leads to a wider attentional scope (Förster and Higgins 2005), and this should drive the search for financial information, as a means to generate further financial alternatives, so that no option is disregarded and that no financial opportunity is lost (cf. Pham and Higgins 2005). Hence, we offer the following:

H1a: Prevention focus is negatively related to financial literacy

H1b: Promotion focus is positively related to financial literacy

Regulatory Focus and Power-prestige. While a prevention-focused individual tends to place greater value on others' preferences and on social norms, a highly promotion-focused individual emphasizes her/his own preferences (Pham and Higgins 2005). Accordingly, individuals with higher levels of prevention focus are more extrinsically motivated, whereas individuals with higher levels of promotion focus are more intrinsically motivated (Kark and Van Dijk 2007). Hence, the interdependent self-view of individuals with a heightened prevention focus is likely to promote a concern with what money can bring them, in order to achieve assimilation with others, and a sense of belongingness (cf. Kark and Van Dijck 2007). The goal of self-enhancement, which is intrinsic by nature, and the self-image of singleness and autonomy of promotion focus (Aaker and Lee 2001) seem to be consistent with a mind-set that does not value money as a trampoline to achieve status. Accordingly, we predict the following:

H2a: Prevention focus is positively related to power-prestige

H2b: Promotion focus is negatively related to power-prestige

Regulatory Focus and Retention-time. Underlying a prevention orientation is a vision of the world around the individual as threatening, leading to a risk-aversion inclination (Friedman and Förster 2001). Moreover, a prevention focus involves a concern with the presence or absence of negative outcomes (Crowe and Higgins 1997), engendering a state of vigilance and a preference for safe choices. Hence, a prevention focus should promote a careful financial planning of the future, as a way of preventing something harmful from happening (Klenk et al. 2011). We also predict self-regulation with a promotion focus to be positively related to retention-time. Nurturance and advancement are associated with maximal goals (Pham and Higgins 2005), which are more easily attained with a long-term horizon. As Pennington and Roese (2003, p. 564) argued, "time affords the luxury of maximal goals. […] individuals have the liberty […] to consider alternative strategies, and to survey information widely". Hence, by saving, individuals build up a reservoir of financial resources that enables them to keep their options open. Thus, we offer the following:

H3a: Prevention focus is positively related to retention-time

H3b: Promotion focus is positively related to retention-time

Regulatory Focus and Distrust. A prevention focus entails the view of a dangerous environment, filled with potential negative events that need to be avoided, which heightens the search for negative signals regarding existing options (Pham and Higgins 2005). In a financial context, individuals with a prevention focus are more likely to approach financial transactions with hesitancy and suspicion, namely regarding the potential negative outcomes of their decisions, the prices they pay and, ultimately, their own financial competencies. Underlying a promotion orientation is a benign vision of the environment (Scholer et al. 2010), entailing an exploratory processing that drives an active search for innovative alternatives (Friedman and Förster 2001). This suggests that promotion-oriented individuals should approach financial situations with greater confidence, looking for the opportunities made possible by specific transactions, not being daunted by the risks associated with money matters. This reasoning leads to the following:

H4a: Prevention focus is positively related to distrust

H4b: Promotion focus is negatively related to distrust

Regulatory Focus and Anxiety. Anxiety is an emotional state associated with attempting to avoid potential negative outcomes (Markman et al. 2007). The prevention orientation causes negative signals in one's environment to become more salient (Pham and Higgins 2005), and perceptions of these, together with the possibility of failure in addressing them, produces anxiety (Klenk et al. 2011). The focus on threats should prompt frequent concerns about not being able to ensure or obtain financial stability, and generate worry when it comes to money issues. In contrast, the vision of a benign environment and the emphasis on positive outcomes of promotion-focused individuals are likely to stimulate an anxiety-free view of money matters. Therefore, we hypothesize:

H5a: Prevention focus is positively related to anxiety

H5b: Promotion focus is negatively related to anxiety

The effects of money attitudes

Power-prestige and Financial Literacy. The perception of money as a tool to achieve power and prestige over others should motivate individuals to learn how to deal with money in lucrative ways, namely to obtain more power and prestige. Increases in financial knowledge might enable individuals to improve their financial status and, thus, gain power over others. Against this, however, Sohn et al. (2012) found money as a source of power/freedom (close to our construct) to be unrelated to FL. Notwithstanding, we offer the following hypothesis:

H6: Power-Prestige is positively related with financial literacy

Retention-time and Financial Literacy. Individuals scoring high on retention-time exercise self-control, believing that money should be carefully preserved to cater for their future (Burgess et al. 2005). This suggests that these individuals should look for information on financial matters, as a way of better accounting for their future (Burgess et al. 2005), thus contributing to FL. Von Stumm et al. (2013) found the related money-security attitude to be positively associated with the capacity to stay informed about current economic developments. Formally,

H7: Retention-time is positively related to financial literacy

Distrust and Financial Literacy. The lack of trust in situations involving money concerns not only the character and motives of those with whom transactions are being made, but also the efficacy of the individual himself or herself (Burgess et al. 2005). Hence, distrust should inhibit the search for financial information, namely because such individuals suspect the motives of information providers (Burgess et al. 2005), and this adversely affects an individual's FL. In line with this, Sohn et al. (2012) argue that those looking at money as something to avoid are more reluctant to actively learn about money issues. Hence, we offer the following:

H8: Distrust is negatively related to financial literacy

Anxiety and Financial Literacy. Anxiety has been positively related to compulsive buying (Roberts and Jones 2001), one of the reasons being that the latter is seen as a quick fix for anxiety (Roberts and Sepulveda 1999). This suggests that being anxious about money should reduce the motivation to exercise self-control. Hence, the ensuing failure to exercise self-control leads individuals to surrender to impulses and to seek short-term gratification, foregoing longer-term goals. This suggests that anxiety should reduce information collection efforts regarding money matters, as these entail a short-term sacrifice. Accordingly, we offer the following:

H9: Anxiety is negatively related to financial literacy

Methodology

To collect the data, we relied on a pre-tested self-report questionnaire distributed to 1,942 students of a major public university in Portugal. Respondents were ensured about anonymity and confidentiality. Valid responses were received from 682 students, yielding a net response rate of 35.1%. Respondents ranged in age from 18 to 29 with a mean of 20.8, most were undergraduates (78%), and 61.8% were female.

We relied on previously validated measures and used a five-point Likert scale. Accordingly, we used the Money Attitudes Scale (MAS) by Yamauchi and Templer (1992), and for RF we relied on Lockwood et al. (2002) – see Table 1 for scale items. FL was based on Lusardi and Mitchell (2008). We used their three questions meant to capture basic financial knowledge, but we adapted Question 1, so as to capture students' knowledge about the functioning of interest compounding, as in Agnew and Harrison (2015), rather than the calculation of simple interest earnings. Since these three questions are parsimonious and have been widely used in surveys, they became known as the "Big Three" (Hastings et al. 2013).

Subsequently, we relied on confirmatory factor analysis to assess the psychometric properties of the multi-item measures. Due to the large number of items per measure, we resorted to item-parceling, which is common in latent variable analysis (Coffman and MacCallum 2005). Random assignment was used to build the parcels (Little et al. 2002). The fit indexes for our CFA model are quite reasonable: $\chi 2 = 292.17$, df = 137 $p < .01$, Incremental Fit Index [IFI] = .97, Tucker–Lewis Index [TLI] = .96, Comparative Fit Index [CFI] = .97, Root Mean Square Error of Approximation [RMSEA] = .040. The standardized loadings are large and highly statistically significant, with the lowest critical ratio above 17. The composite reliabilities exceed the recommended .70

threshold, and the average variances extracted surpass the .50 mark. Moreover, the average variances extracted exceed the corresponding squared correlation between any two pairs of variables. Therefore, there is evidence of scale reliability and validity. Table 1 presents the items/parcels and the corresponding standardized loadings, and Table 2 presents the correlations, standard deviations, composite reliabilities and averages variances extracted.

[INSERT TABLE 1 & 2 ABOUT HERE]

As we rely on a single respondent, we conducted a number of tests to assess the magnitude of common method variance (CMV). We conducted the Harmon-one factor test, and compared the hypothesized six-factor CFA model with a single factor model, observing that the former yielded a much better fit (Kafetsios and Zampetakis 2008). Finally, we ran a number of CFAs for comparing simpler models with the more complex six factor hypothesized CFA model. If a simpler model fits better than or similarly to more complex models, this suggests that CMV might be present (Chaudhuri and Ligas 2009). These different methods suggest that CMV is not a significant concern.

Results

To test the research hypotheses we resorted to AMOS 22. Since the dependent variable has four ordered levels (zero, one, two, and three correct answers), we compared the Bayesian estimation with that of maximum likelihood with bootstrapping, finding that across these estimations the significant paths were the same (cf. Byrne

2010). Accordingly, we retained the results of the latter approach. The fit statistics for the structural model are quite reasonable: $\chi2$=340.74, df=176, p<.01; IFI=.97; CFI=.97; TLI=.96; RMSEA=.04. In these estimations, we controlled for age and gender. As an additional check on CMV, we introduced in the structural model a marker variable, satisfaction with public health services, with paths to all dependent variables in the model. All paths that were previously significant remained so with the introduction of the marker variable. Moreover, the overall fit worsened in a significant way (χ^2=396.21, df=214). This is a further signal that CMV is not a significant concern (Siemsen et al. 2010).

Overall, the results provide strong support for our predictions (Table 3). As expected, prevention (b=-.11; p<.05) is negatively related to FL, thus supporting H1a. Prevention is related to all dimensions of MA. The signs of the relationships accord with expectations, except for the path between prevention and retention-time, for which we observe a significant negative relationship (b=-.11; p<.01), implying that H3a is not supported. Prevention is positively related with power-prestige (b=.24; p<.01), supporting H2a, with distrust (b=.47; p<.01), supporting H4a, and with anxiety (b=.45; p<.01), supporting H5a. As to promotion, we observe that it is positively related to FL (b=.11; p<.05), supporting H1b. Promotion is not significantly related to power-prestige (b=-.06; p>.05), thus not supporting H2b. However, and as expected, it relates positively to retention-time (b=.36; p<.01), supporting H3b, and negatively to distrust (b=-.13; p<.05), supporting H4b. Finally, promotion does not relate in a significant way to anxiety (b=-.03; p>.05), leading to the rejection of H5b.

[INSERT TABLE 3 ABOUT HERE]

As to the relationships between MA and FL, these tend to conform to predictions, the exception being the path between anxiety and FL, which is not significant (b=.06; p>.05), thereby failing to support H9. Power-prestige is positively related to FL (b=.15; p<.01), supporting H6; retention-time is positively related to FL (b=.10; p<.05), supporting H7; and distrust relates negatively to FL (b=-.19; p<.01), leading to the acceptance of H8.

Finally, we tested whether MA mediated the relationship between regulatory focus and FL. Prevention has an indirect negative effect on FL, and promotion a positive indirect effect, both of which are significant at the 1% level. Therefore, the effects of prevention and promotion are partially mediated by MA.

Discussion and implications

Our study was the first to relate RF and FL, considering as well the potential mediating role of MA. Most of the research hypotheses received empirical support. Hence, this study tested a number of novel relationships, with the results yielding relevant implications. Both prevention and promotion orientations are directly and indirectly related to FL, although in different ways. Prevention focus has a direct negative relationship with FL, as well as an indirect one through retention-time and distrust. Surprisingly, prevention is positively related to FL through power-prestige. Promotion has a direct positive relationship with FL, as well as an indirect one, via retention-time and distrust. Apparently, evoking a promotion-focus boosts a money retention attitude and trust in situations involving money, which in turn promote FL. These results, which are novel, suggest that individuals' motivation play a role in developing knowledge about financial issues. A major source of prevention and promotion motivational states is socialization (Pham and Higgins 2005). Nonetheless, a state of prevention or promotion can also be induced by situational factors (Zhou and Pham 2004), namely by framing tasks/objects in terms of gains versus non-gains. This suggests that financial educators can rely on these insights to prime FL programs in a prevention or promotion way. The identification of how specific individual characteristics affect the motivation to develop knowledge about financial issues is likely to play a significant role in guiding financial educators in choosing the right approach to help individuals in need of financial counselling. For example, while prevention-oriented young adults may relate to the need of building an emergency fund to repair an eventual car breakdown, promotion-oriented ones may be more responsive to the importance of saving to buy a car.

Prevention, as expected, relates positively to power-prestige, distrust, and anxiety. Furthermore, it relates negatively to retention-time, and this was unexpected. Saving money in the present to ensure resource availability in the future requires individuals to exert self-control (Baumeister 2002). However, it is possible that such future benefits may appear too far away for young adults, driving them to opt for preventing immediate losses rather than distant ones. In summary, it appears that a prevention focus tends to foster a less healthy relationship with money.

Promotion was predicted to be negatively related to power-prestige, but we obtained instead a non-significant finding. Roy and Ng (2012) determined that promotion-focused consumers exhibited more favorable attitudes towards products in which the hedonic attributes were highlighted. Hence, it is also likely that money may provide access to hedonic products, which tends to drive consumers to think of excitement and enjoyment (Babin et al. 1994). As expected, a promotion orientation relates positively to retention-time, and this may result from the need of young adults to keep future opportunities, open. It is negatively related to distrust, and this possibly results from their vision of a benign world. Against expectations, promotion was not significantly related to anxiety. Anxiety concerns an individual's worry involving money. These issues have a utilitarian nature and promotion-oriented individuals, being focused on gains and non-gains, might be more sensitive to hedonic rather than to utilitarian aspects of consumption (Arnold and Reynolds 2009). In sum, promotion goals appear to spur, to some extent, a healthy relationship of young adults with money.

The relationships we observed between MA and FL tend to conform to predictions. Power-prestige is positively related with FL, and this contrasts with the findings of Sohn et al. (2012), who obtained a non-significant relationship between FL and power/liberty, a close construct, in a student sample. Although power-prestige has been related to undesirable behaviors, such as compulsive buying among students (e.g., Roberts and Jones 2001), our study suggests that it can also have positive outcomes, namely in terms of FL. Retention-time involves precautionary motives, hence its positive relationship with FL. As to distrust, as predicted, we obtained a negative relationship with FL. Finally, we predicted a negative relationship between anxiety and FL but the relationship is non-significant. Individuals viewing money as a source of anxiety also perceive it as an escape from anxiety (Yamauchi and Templer 1982). Hence, it is possible that anxiety might drive young adults to look for information as a way of reducing it, and this may have countervailed the mechanism we predicted. Therefore, acting upon MA appears important as our results suggest that they are relevant for the dissemination of the RF effects.

Conclusions and limitations

Our study illustrates some of the mechanisms through which RF might influence the FL of young adults. The results show that prevention and promotion are associated with FL, both directly and indirectly via MA. The results further show that a prevention focus tends to foster a less healthy relationship of young adults with money, which contrasts with the effects of a promotion focus. Moreover, our results suggest that priming FL programs in a promotion or prevention way might boost young adults' motivation to learn about personal financial management. Additionally, acting upon young adults' MA might also influence their predisposition to acquire FL.

However, our contributions must be seen in the context of the study's limitations. The first is that being based on a self-report questionnaire, the issue of CMV must be considered. We minimized the potential influence of CMV by employing a number of procedural remedies. We also applied a number of statistical tests to ascertain the magnitude of CMV. A second limitation is that the study was conducted with respondents from a single country, and there are cultural variations across countries, namely in the way people consider money. Another limitation of the study concerns its cross-sectional nature, which inhibits any causation inference. Related studies can also explore the effectiveness of FL programs in the context of participants' regulatory orientations. This is particularly relevant given the mixed findings concerning the effectiveness of FL initiatives. It is possible that the results of such projects are contingent upon an individual's regulatory orientation. Finally, it would be interesting to study the relationship between RF and other financial attitudes and behaviors of young adults, including saving and level of debt.

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Table 1: Confirmatory Factor Analysis Results

Constructs and items	Stand. loadings	t-value
Prevention		
I often imagine myself experiencing bad things that I fear might happen to me. / I frequently think about how I can prevent failures in my life.	.76	20.70
I often worry that I will fail to accomplish my academic goals. / I am more oriented toward preventing losses than I am toward achieving gains.	.72	19.29
My major goal in school right now is to avoid becoming an academic failure. / I often think about the person I am afraid I might become in the future.	.72	19.24
Promotion		
I often think about how I will achieve academic success. / In general, I am focused on achieving positive outcomes in my life.	.88	26.52
I typically focus on the success I hope to achieve in the future. / I often imagine myself experiencing good things that I hope will happen to me.	.78	22.56
I frequently imagine how I will achieve my hopes and aspirations. / I often think about the person I would ideally like to be in the future. / My major goal in school right now is to achieve my academic ambitions.	.78	22.80
Power-prestige		
I must admit that I purchase things because I know they will impress others. / In all, honesty, I own nice things in order to impress others. / I use money to influence other people to do things for me.	.78	23.35
People I know tell me that I place too much emphasis on the amount of money a person has as a sign of success. / I must admit that I sometimes boast about how much money I make.	.80	24,14
I behave as if money were the ultimate symbol of success / I seem to find that I show more respect to people with more money than I have.	.85	26.46
Although I should judge the success of people by their deeds, I am more influenced by the amount of money they have. / I try to find out if other people make more money than I do.	.80	23.86
Retention-time		
I put money aside on a regular basis for the future. / I am very prudent with money. / I save now to prepare for my old age.	.87	23.67
I do financial planning for the future. / I have money available in the event of another economic depression.	.80	21.51
I follow a careful financial budget. / I keep track of money.	.59	15.50
Distrust		
I hesitate to spend money, even on necessities. / I automatically say “I can´t afford it” whether I can or not. / It bothers me when I discover I could have gotten something for less elsewhere.	.70	18.79
When I buy something, I complain about the price I paid. / I argue or complain about the cost of things I buy.	.74	19.86
After buying something, I wonder if I could have gotten the same for less elsewhere. / When I make a major purchase, I have a suspicion that I’ve been taken advantage of.	.75	20.22
Anxiety		
I worry that I will not be financially secure / It´s hard for me to pass up a bargain.	.72	19.38
I show worrisome behavior when it comes to money. / I spend money to make myself feel better.	.67	17.86
I show signs of nervousness when I don’t have enough money. / I am bothered when I have to pass up a sale.	.80	22.02

Model fit: χ^2=292.17, df=137, p<.01; IFI=.97; CFI=.97; TLI=.96; RMSEA=.04

Table 2 - Standard Deviation, correlation matrix, reliability, and variance extracted for the constructs

	1	2	3	4	5	6	SD	CR	AVE
1. Prevention	**.77**						.53	.78	.54
2. Promotion	.51	**.85**					.48	.86	.66
3. Power-prestige	.20	**.05**	**.88**				.48	.88	.65
4. Retention-time	.03	.28	-.06	**.79**			.68	.80	.58
5. Distrust	.41	.11	.32	.17	**.77**		.51	.77	.53
6. Anxiety	.44	.20	.38	.07	**.66**	**.77**	.53	.78	.54

Notes: Diagonal entries are Cronbach's alpha coefficients; SD – Standard Deviation; CR – composite reliability; AVE – average variance extracted.

Table 3: Results of the Structural Model

Path	***Hyp.***	***Stand. coef.***
Prevention → FL	H_{1a}(-)	-.11 *
Promotion → FL	H_{1b}(+)	.11 *
Prevention → Power-prestige	H_{2a}(+)	.24 **
Prevention → Retention-time	H_{3a}(+)	-.15 **
Prevention → Distrust	H_{4a}(+)	.47 **
Prevention → Anxiety	H_{5a}(+)	.45 **
Promotion → Power-prestige	H_{2b}(-)	-.06
Promotion → Retention-time	H_{3b}(+)	.36 **
Promotion → Distrust	H_{4b}(-)	-.13 *
Promotion → Anxiety	H_{5b}(-)	-.03
Power-prestige → FL	H_6(+)	.15 **
Retention-time → FL	H_7(+)	.10 *
Distrust → FL	H_8(-)	-.19 **
Anxiety → FL	H_9(-)	.06
Age → FL		.04
Age → Power-prestige		.01
Age → Retention-time		.05
Age → Distrust		-.03
Age → Anxiety		.05
Gender → FL		-.23 **
Gender → Power-prestige		-.17 **
Gender → Retention-time		.09 *
Gender → Distrust		.05
Gender → Anxiety		.18 **

Goodness-of-fit statistics: χ^2=340.74, df=176, p<.01; IFI=.97; CFI=.97; TLI=.96; RMSEA=.04

** p<.01; * p<.05 (one tailed tests)