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ME, MYSELF AND MY FUTURE-SELF: HOW SELF-MOTIVES IMPACT PERSONAL FINANCIAL DECISION MAKING

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by

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To: Interim Dean William Hardin College of Business

This dissertation, written by Patricia Torres, and entitled Me, Myself and My Future-self: How Self-motives Impact Personal Financial Decision Making, having been approved in respect to style and intellectual content, is referred to you for judgment. We have read this dissertation and recommend that it be approved.

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DEDICATION

I dedicate this dissertation to my mother, Mara. Her tenacity and neverending love, although sometimes tough, made me the person I am today. She taught me through her example what hard work looks like, and she made me fall in love with education; an opportunity she never had. My mother showed me that, with God, all things are possible. And I am here today, living proof of that. Thank you mom. I love you forever.

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ABSTRACT OF THE DISSERTATION

ME, MYSELF AND MY FUTURE-SELF: HOW SELF-MOTIVES IMPACT PERSONAL FINANCIAL DECISION MAKING

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The role of self-motives on consumer behavior has been a subject of interest for researchers in the fields of marketing and psychology. With regard to consumer well-being, most of studies have focused on health-related issues (diet, physical activity, tobacco use, substance abuse). However, there is a specific area that is of significant interest in the American context: financial decision making, specifically, personal savings and debt (mis) management. Both the 2008 financial crisis and the ongoing coronavirus pandemic exposed Americans' lack of savings and its devastating consequences. A record-high consumer debt (Federal Reserve, 2018) combined with a lack of savings (Northwestern Mutual, 2018) underscore the need for a better understanding of financial decision-making.

The goal of this research is to examine the link between seemingly independent strategies, within the domain of financially responsible behavior. I integrate self-concept motives, with construal level theory to develop a theorectical framework. Specifically, the model anticipates that contextual cues that elicit selfenhancement (self-consistency) motives evoke a high (low) construal level, which in

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turn positively (negatively) impacts consumer self-control, reflecting on their financial behavior intentions.

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CHAPTER 1: INTRODUCTION

"Money isn't the most important thing in life, but it's reasonably close to oxygen on the 'gotta have it' scale." Zig Zigler

1.1 Introduction

The purpose of this research is to investigate whether self-reflection about abstract (e.g., ideal) versus concrete (i.e., actual) self-concept facets activates selfcontrol in a low-effort manner, which improves consumer financial decision making. Financial decisions directly impact consumer well-being (Soman et al., 2012). Research has demonstrated that consumers who experience low financial distress report better health than those under high financial distress (O'Neill et al., 2006). Financial decision making research, specifically personal savings and debt (mis) management, is of significant interest in the American context. According to the Federal Reserve (2017), Americans had \$1.027 trillion in outstanding revolving credit in 2017. The Pew Charitable Trusts revealed that 80% of Americans are under some form of debt (Pew Research, 2015). The Federal Reserve's report on the American population's economic well-being indicated that one quarter of the non-retired population reports no retirement savings or pensions (Board of Governors of the Federal Reserve System, 2018). A 2018 study indicated that 21% of Americans have no savings, whereas one-third of Americans have less than \$5,000.00 in retirement savings (Northwestern Mutual, 2018). Both the 2008 financial crisis and the ongoing coronavirus pandemic exposed Americans' lack of savings and its devastating consequences. Given the dismal financial situation of a large segment of the American population, research that sheds light on how consumers can improve their self-regulation to achieve favorable financial goals is important for consumer wellbeing.

Prior research identifies various antecedents of financial decisions and behavior such as cognitive abilities (Goldstein, Hershfield, & Benartzi, 2016; Hershfield & Roese, 2015), goal pursuit strategies (Amar et al., 2011; Brown & Lahey, 2015; Kettle et al., 2016), personal beliefs (Yoon & Kim, 2016, 2018), and future-self considerations (Bartels & Urminsky, 2011, 2015; Ellen, Wiener, & Paula Fitzgerald, 2012; Hershfield et al., 2011), significantly impact consumers' financial decisions making. However, as with most goal-directed behaviors, self-control is a key predictor of financial decision making (Haws et al., 2012, 2016; Strömbäck et al., 2017). Self-control is defined as the ability to refrain from impulses and desires and/or to engage in difficult or laborious behavior in order to achieve a goal (Baumeister, 2002). Exerting self-control can involve using one's will power to consciously refrain from goal-inconsistent actions, which is a controlled, cognitive process that uses cognitive energy to control and regulate impulses (Timpano & Schmidt, 2013). Alternately, self-control can be activated in a less effortful manner such as via high level construal framing of the goal. Fujita and Han (2009) conducted a study in which differences in goal-framing (abstract versus concrete) lead to greater (versus lower) self-control in subsequent choices. In another study, high (versus low) level construal of their specific savings goals increased consumers' success in achieving their savings goals (Ulkumen & Cheema, 2011). Given that relying on effortful self-control processes for achieving financial goals is subject to the pitfall of limited cognitive resources (Vohs & Faber, 2007), this dissertation aims to demonstrate a novel means of low-effort self-control activation by high level construal mindset through reflection on the ideal (versus actual) self.

Drawing from construal level theory (Liberman & Trope, 1998), Malär and colleagues (2011) argue that there is greater psychological distance associated with a

person's mental representation of their ideal self-concept relative to their actual selfconcept. Given that the conception a person holds of their actual self is based on present-day reality, the traits that represent the actual self are more concrete, detailed, and attached to the specific situations or contexts where the traits apply. On the other hand, a person's representation of their ideal self contains traits that the person likely has less experience with, making these traits more abstract and lacking in detail and context. Therefore, due to its concreteness, when a person reflects on their actual selfconcept a low level mental construal mindset is activated. Alternately, due to its abstractness, when a person reflects on their ideal self-concept a high level mental construal mindset is activated. Building on research that shows that higher level mental construal is associated with greater self-control (Fujita et al., 2006), I propose that the high level construal mindset associated with reflection on abstract selfconcept facets, such as the ideal self, promotes greater self-control (relative to the low level construal mindset associated with actual self-reflection) in financial decision making concerning saving and credit card usage.

1.2 Research Purposes and Objectives

The purpose of this research is to demonstrate a novel means of low-effort self-control activation via consumer reflection on concrete versus abstract facets of their self-concept. The research objective is to demonstrate the positive impact of this self-control mechanism within the financial decision making contexts of savings and credit card usage and to examine the mediating mechanism.

1.3 Research Questions

This dissertation aims to understand the role of self-concept reflection in activating self-control in a lower-effort manner, resulting in goal-consistent financial decision making; more specifically, increased saving and decreased credit card usage. To do so, it relies on theories such as self-concept, construal level, and self-control.

By bridging these theories, this dissertation seeks to answer the following questions:

- A. Does consumer reflection on the abstract (versus concrete) self-concept facets increase self-control during financial decisions involving saving money and increasing credit card debt?
- B. Does the consumer's mental construal level underlie the effect of self-reflection on self-control in financial decision making?
- C. What factors moderate the influence of self-reflection on self-control in financial decision making?

1.4 Summary

An extensive body of research on financial decision making has created a solid foundation for understanding how several goal pursuit-related constructs, such as mental construals and framing (Macdonnell & White, 2015; Ülkümen & Cheema, 2011), sense of goal progress (Kettle et al., 2016), goal visualization (Cheema & Bagchi, 2011), and goal importance (Devezer et al., 2014), impact consumers' financial decisions. However, the majority of financial goal pursuit studies assume that effortful self-control is required for goal success. This research provides insights into a novel low-effort self-control activation mechanism via consumer self-reflection

on abstract (versus concrete) self-concept facets that can positively influence financial decision making involving saving and credit card usage.

CHAPTER 2: CONCEPTUAL BACKGROUND

2.1 Consumer Financial Decision Making Research

The literature on consumer behavior offers several definitions of "financial decision making". For instance, according to Thaler and Benartzi (2004), decisions are considered "financial" when consumers seek to enhance their well-being through the usage of financial products. The definition I adopt classifies decisions as "financial" when they dramatically affect consumers' goal setting and goal achievement, due to their impact on consumers' overall financial situation (Lynch, 2011; Lynch et al., 2010; Soll et al., 2013; Spiller, 2011). Research on consumer financial decision making is extensive and consists of several main research areas: savings, spending, debt (mis) management, budget and resource allocation, risk taking, education, information disclosure and choice architecture, and financial goal pursuit. Appendix A denotes a table that summarizes the literature on consumer financial decision making (2010 to 2019) from the following journals¹: *Journal of Marketing, Journal of Marketing Research, Journal of Public Policy Marketing, Journal of Consumer Research, Journal of Consumer Research, Journal of Consumer Psychology*².

Research in consumers' savings behavior has shed light on several drivers of savings such as threats to self-image (Steinhart & Jiang, 2019), state of power (Garbinsky et al., 2014), stress (Durante & Laran, 2016), earmarking strategies (Soman & Cheema, 2011), time orientation (Tam & Dholakia, 2014), goal specificity (Ülkümen & Cheema, 2011), connectednessn to one's future self (Hershfield et al., 2011) and others. Moreover, spending research has focused on several antecedents of

¹ Articles that are relevant to the present dissertation published in other journals were also included on the table.

² JM, JMR, JPPM, JCR, JPSP, JBR, JCP

spending behavior. These antecedents include, how contextual cues (Di Muro & Noseworthy, 2013; Raghubir & Srivastava, 2008), personal state, such as power (Rucker et al., 2011) financial constraint (Tully et al., 2015) financial equality (Ordabayeva & Chandon, 2011) and stress (Durante & Laran, 2016) impact spending behaviors. Individual differences in spending patterns (Rick et al., 2008; Thomas et al., 2011) have also been a matter of investigation within consumer research regarding spending behaviors.

Debt (mis) management research centers on consumers' reasons to go into debt (Tully & Sharma, 2018; Wilcox et al., 2011) as well as the strategies they adopt to try to go out of debt (Amar et al., 2011; Besharat et al., 2014, 2015; Brown & Lahey, 2015; Gal & McShane, 2012; Kettle et al., 2016). Budget and resource allocation research has focused on the effects of budgeting on consumers' overall financials (Bermanet al., 2016; Carlson et al., 2015; Larson & Hamilton, 2012; Soman & Cheema, 2011; Sussman & O'Brien, 2016) and satisfaction (Soster et al., 2014).

Research on risk taking centers on how environmental cues (Duclos & Jiang, 2013; Zhu et al., 2012) as well as constructs related to the self (Disatnik & Steinhart, 2015; Han et al., 2019) impact consumers' risk tolerance. Education, information disclosure and choice architecture research concentrates mainly on how educational interventions can improve consumers' financial decision making (Duclos, 2014; Fernandes et al., 2014; Frank, 2011; Lynch & Wood, 2006; Mckenzie & Liersch, 2011), and how the way information is presented to consumers impacts their financial decision making behavior (Hershfield & Roese, 2015; Mazar et al., 2018; Navarro-Martinez et al., 2011; Salisbury, 2014).

Financial goal pursuit encompasses several aspects of consumer financial decision making research, with emphasis on savings (Dholakia et al., 2016; Garbinsky

et al., 2014; Sussman & O'Brien, 2016; Yoon & La Ferle, 2018), as well as spending (Durante & Laran, 2016; Rucker et al., 2011; Yoon & Kim, 2016), retirement planning (Hershfield et al., 2011; McKenzie & Liersch, 2011), borrowing (Atlas et al., 2017; Tully & Sharma, 2018), and repayment behaviors (Amar et al., 2011; Brown & Lahey, 2015; Kettle et al., 2016). Additionally, financial goal pursuit research has investigated the role of self-control within savings (Laran, 2010; Soman & Cheema, 2011), spending and borrowing decisions (Bartels & Urminsky, 2015; Haws et al., 2016). Financial wellbeing is conceptualized in two dimensions: The strees of managing money in the present and how secure one sees his financial future (Netemeyer et al., 2017). In order to achieve financial wellbeing, consumers must engage in financial goal setting and striving. This dissertation research contributes to the financial goal pursuit literature, which I expand upon in the section that follows.

2.2 Pursuit of Financial Goals

"Self-discipline is about leaning into resistance. Taking action in spite of how you feel. Living a life by design, not be default. But more importantly, it's acting in accordance with your thoughts – not your feelings." Sam Thomas Davies

The research in this area views financial behaviors, such as savings and overspending, as financial goals. As such, they are characterized by a hierarchical structure with super-ordinate and sub-ordinate goals (Devezer et al., 2014), varying levels of specificity (Ülkümen & Cheema, 2011), importance (Devezer et al., 2014), difficulty (Cheema & Bagchi, 2011) and concreteness (Lee & Ariely, 2006).

The process of pursuing financial goals involves goal setting (the act of selecting a specific target for achievement; (Morisano et al., 2010) and goal striving (effort, persistence, attention and strategic planning employed in the pursue of a specific goal; (Reeve, 2008). Financial goal setting entails the types of financial

behaviors consumers commit to such as saving, investing for retirement, repaying debt, as well as the choice of one or more sub goals as a means to achieving the desired financial goal. Financial goal striving consists of planning, initiating action and making instrumental adjustments to achieve goal success (Bagozzi & Dholakia, 1999). An example of instrumental adjustments to achieve financial goal success includes planning and executing a strategy to get out of debt and arranging automatic transfers for savings purposes.

Successful goal striving relies heavily on self-control processes (Soman et al., 2012). Self-control is linked to one's ability to behave not in accordance with their desires or feelings but in accordance to one's needs and circumstances (Haws et al., 2016). In fact, Freud (1930) proposed that the self's capability to curb antisocial behaviors in order to adapt with the requirements of collective life is a strong determinant of civilized life. In this regard, self-control is defined as "a struggle between impelling forces, such as prepotent impulses and desires, and restraining forces, such as self-regulatory goals" (Hofmann & Van Dillen, 2012 p. 317). Research has uncovered some of the constructs that exert impact over self-control. For instance, focus on one's future-selves leads to more self-control oriented choices (Hershfield et al., 2011; Laran, 2010; Molouki & Bartels, 2020). Of specific interest to this investigation are the effects of construal level mindset activation on subsequent decisions that involve self-control. For example, Fujita and colleagues (2006) conducted a series of six experiments in which participants prompted to high (low) level of mental construal exhibited a lower preference for immediate (smaller) over delayed (larger) rewards, compared to participants in the low level of mental construal condition. Further research has investigated and expanded the knowledge regarding the effects of mental level of construal on subsequent self-control related choices and

behaviors (Dusthimer Bevan, 2019; Fujita, 2011; Fujita & Carnevale, 2012; MacGregor et al., 2017).

Many studies have demonstrated the important role self-control plays in financial goal pursuit. For instance, self-control has been determined as an antecedent of self-regulatory behaviors, such as savings choices (Hofmann et al., 2012; Laran, 2010; Soman & Cheema, 2011; Soman et al., 2012; Vanbergen & Laran, 2016), as well as a crucial skill necessary to curb impulsive behavior (Haws et al., 2016; Romero & Craig, 2017; Yoon & Kim, 2016) such as impulse spending. As previously mentioned, it is known that self-concept motives exert impact on one's mental level of construal (Alicke and Sedikides, 2009; Liberman et al., 2007; Malär et al., 2011). Additionally, research has uncovered the impact of mental level of construal on selfcontrol (Fujita, 2011; Fujita et al., 2006). In spite of these previous studies that had linked self-concept motives to changes in construal level mindset, and more importantly, the research connecting mental level of construal to self-control, consumer behavior research has been remarkably absent in terms of investigating the role of the self-concept motives within self-control in financial decision making.

The present dissertation centers on further understanding consumers' financial decision making processes. It is vastly known that self-control is a major antecedent of financial decision making (Haws et al., 2012, 2016; Strömbäck et al., 2017). Therefore, constructs and processes that influence individuals' self-control are of interest to this investigation. Consumer behavior research has determined self-control to be a limited resource (Baumeister et al., 1998; Muraven et al., 1998; for a detailed review see Inzlicht et al., 2021). For instance, impulse buying is more prominent right after self-control exertion (Vohs & Faber, 2007). Interestingly, Wan and Agrawal (2011) examined how exerting self-control impacted individuals' subsequent pattern

of decision making; specifically, they found that after exercising self-control, participants were more likely to choose products framed in proximal rather than distant perspectives. This was due to the fact that self-control depletion prompts a lower level of mental construal (Wan & Agrawal, 2011).

Plentiful research has shed light on the influence of mental level of construal on self-control (Dusthimer Bevan, 2019; Fujita et al., 2006; Fujita, 2008, 2011; Fujita & Carnevale, 2012; MacGregor et al., 2017). For instance, Fujita and colleagues (2006) determined that a higher level of mental construal positively impacted individuals self-control in several contexts, including the ability to delay gratification and endurance of physical discomfort. Simply put, a higher, more abstract level of mental construal enhances self-control in subsequent decisions and behaviors, compared to a lower, more concrete level of mental construal. Interestingly, the mere presence of subjective higher levels of mental construal (without wilful consideration) of events or decisions can positively influence individuals' self-control (Fujita & Han, 2009). The present research adds to the literature on financial decision making by examining how consumers' focus on their self-concept (self-awareness) influences self-control through its effect on mental level of construal. In the following section, I expand upon the self-concept motives constructs and their importance to the current investigation.

2.3 Self-concept

One's self-concept can be described as the beliefs individuals hold about themselves, along with their personal attributes, desires, aspirations and possible selves (Baumeister, 1999). Markus and Nurius (1986), argued that the self-concept is malleable, which means it is subject to influence from one's personality, circumstances and situational cues. The self-concept is made up of one's self-schemas

and, as such, the self-concept is a multifaceted construct (Higgins, 1987; James, 1890; Leary & Tangney, 2012). Self-concept facets include the actual self - a self-concept dimension, or cognitive schema that contains the self-describing attributes one believes oneself to possess (Maroiu & Maricutoiu, 2020), the ideal self - a selfconcept dimension that consists of one's desires, hopes and aspirations (Ganesan, 2020), the ought self – a cognitive schema that refers to whom one believes they should or must be (Mason & Smith, 2020), and the future self - how one sees themselves in the future (Hershfield & Bartels, 2018; Pronin & Ross, 2006).

In the next section, I further explore the self-motive construct and its importance to the current investigation.

2.4 Self-Motives

The distinct self-concept facets contained in an individual's self-schema often give rise to motivational states, known as self-motives, given that individuals commonly seek to align their actions as congruently as possible with certain facets of their self-concept. For example, self-consistency motives impel people to act in a consistent manner according to their actual view of themselves (Cross & Markus, 1991; Markus & Nurius, 1986; Oyserman & Markus, 1990). As a result, consumers favor self-congruent (compared to self-incongruent) behaviors (Aaker, 1999).

Previous research on self-concept is founded on the assumption that consumers' self-descriptions carry strong behavioral prediction power (Baumeister, 1998; Browman et al., 2017; Elmore & Oyserman, 2012; Roccas & Brewer, 2002). In other words, merely reflecting on an abstract self-concept facet, such as the ideal self, is sufficient to trigger psychological discomfort due to a perceived gap between one's current, actual self-concept relative to the abstract self-concept facet, resulting in the

motivation to reduce the self-discrepancy(Carver & Scheier, 1982). Self-enhancement and self-consistency, in particular, are self-motives that are known for their robust influence on human behaviors (Alicke & Sedikides, 2009; Banaji & Prentice, 1994; Gebauer et al., 2017; Valenzuela et al., 2018) and have been studied in marketing and psychology due to their behavioral importance (Dagogo-Jack & Forehand, 2018; Lin et al., 2018; Mathur et al., 2016; Thyroff & Kilbourne, 2018; van Gils & Horton, 2019; Wu et al., 2018). Thus, this dissertation focuses on these two important selfmotives and elaborates on each one subsequently.

2.4.1 Self-consistency

Self-consistency stems from the basic premise that consumers develop an organized set of congruent self-perceptions across all the facets that form the self-concept (Sirgy, 1985), acquiring an understanding of who they are (Elliott, 1986; Lecky, 1945). The elements of the self-concept (e.g., actual self, ideal self, ought self) do not exist isolated and independent of each other (Baumeister, 1998). Self-consistency motivates individuals to act in ways that are consistent with their self-perception (actual-self traits). In other words, self-consistency prompts people to maintain a cohesion across the multiple facets that form their self-concept as well as to act in convergence with such dimensions (Ashforth & Johnson, 2012; Elliott, 1986; Oyserman, 2009).

For example, imagine a consumer who has a part of their self-schema rooted in their "low-income" identity (self-ascribed category label). To satisfy selfconsistency motives, such an individual will seek to base their actions in convergence with the "low-income" identity. When this person sets a goal to save money and inevitable roadblocks arise, the interpretation of difficulty will be construed as

"saving money is not for people like me" to remain consistent with the "low-income" identity.

Now, imagine another individual who has a part of their self-schema rooted in the "bread-winner" self-ascribed identity. This person will seek to align their actions with this particular identity. If this same individual has a goal to save money, then when adversity appears, the interpretation of difficulty will be understood as "*saving money is important and even if it is hard, it must be done*" in the interest of maintaining convergence with the "bread winner" identity.

The examples above describe the desire for stability and continuity in the self across identities, self-conceptions, personal attributes, and conditions (Cooper & Thatcher, 2010). Consumers behave in ways that aid them in preserving their selfview and perpetuating their self-conceptions (Swann et al., 1987). In conclusion, consumers with a self-consistency motivation will strive to maintain their selfconceptions, even if it hurts other aspects of the self, such as self-esteem (Dipboye, 1977). Below, I explore another self-motive that is of interest to the current investigation: self-enhancement.

2.4.2 Self-enhancement

Self-enhancement stems from the basic human need to maintain self-esteem or hold a positive self-view (Baumeister, 1998; Valenzuela et al., 2018). Often, selfenhancement motives are aimed at diminishing the gap between the actual self and the ideal self (Tesser, 2000; Tesser & Campbell, 1980) and are more prevalent in a domain that is central to one's main self-ascribed identity (Sedikides & Strube, 1997). This "self-centrality breeds self-enhancement" principle is known as the "selfcentrality" principle (Gebauer et al., 2013, p. 262). The domains in which consumers

present higher interest are those that are central to their main identity. These domains typically present the larger actual to ideal-self gap (Gebauer et al., 2013), and these are the areas in which individuals tend to engage in maximum self-enhancement (Gebauer et al., 2017). For instance, take a student that has their identity rooted in their "straight A's student" self-ascribed category. This student's ideal self does not contains a B+. When the actual student gets any grade lower than A, he or she will engage in maximum self-enhancement as to match their ideal in this facet that is central to their identity.

Self-enhancement has positive and negative consequences for individuals. On the positive side, people who feel good about themselves are less likely to develop depression due to low self-esteem (Taylor et al., 2003), report better personal relationships (Alicke & Sedikides, 2009), and tend to be more successful in goalpursuit (Alicke & Govorun, 2005). Conversely, behaviors deemed socially undesirable are common in individuals motivated to self-enhance: for example, taking undeserved credit for positive outcomes and refusing responsibility for negative ones (Bradley, 1978; Zuckerman, 1979), selectively recalling information (Sedikides & Gregg, 2003), and overemphasizing the ability of those they compete with, especially those who outperform them (Alicke et al., 1997).

Consumer behavior research acknowledges the ideal self as a desired state (Choi & Rifon, 2012; Landon, 1974), and as the standard to which consumers compare themselves when motivated to self-enhance (Malär et al., 2011; Reed et al., 2012). Within self-concept and consumer behavior research specifically, selfenhancement is known as a powerful motive within brand choice processes (Ahmad & Thyagaraj, 2015; Reed, 2002), consumers' engagement in word-of-mouth behaviors (Valenzuela et al., 2018; Wien & Olsen, 2014), as well as a strong mitigator

on the negative effects of materialism on costumer satisfaction (Thyroff & Kilbourne, 2018). In the next section, I elaborate on construal level theory and its hypothesized relationship with the self-motives described above, namely, self-consistency and self-enhancement.

2.5 Construal Level Theory and Goal Pursuit

Construal level theory (CLT) implies that psychological and temporal distance influences people's reactions to future occurrences by shaping the way individuals mentally process such events (Trope & Liberman, 2003, 2010). Regarding temporal distance specifically, it suggests that circumstances that are more distant are construed in a more abstract level, triggered by the essence of such an event or the reasons that make them important (high-level construal). Conversely, closer circumstances are construed in a more concrete level, triggered by their details and how they impact one's life (low-level construal) (Liberman et al., 2002; Trope & Liberman, 2003). For example, an event that is going to happen far in the future (e.g., commencement ceremony for a first-year PhD student) tend to be construed at an abstract level (e.g.: fun, emotional, fancy regalia); however, as the same event draws closer (for a fourthyear PhD candidate), the commencement ceremony tends to be construed at a much more concrete level. Details such as transportation, family members' invitations and photography arrangements are considered, and not only the central attributes such as the emotional and joyful aspects of the event.

According to Trope and Liberman (2010) "psychological distance is egocentric: Its reference point is the self" (p. 440). In other words, one measures the psychological distance according to how close or far the object of evaluation is from their perspective in the here and now. For instance, "we" is psychologically closer

than "them", and as such, when considering events or circumstances in which "we" is the main actor, individuals tend to present a lower level of mental construal. Whereas when the object of consideration is enacted by "them", people are more disposed to engage in higher levels of construal (Bar-Anan et al., 2007). In the financial decision making literature specifically, research on the personal savings goal context shows that consumers tend to perceive goals that are easy to visualize to be closer than goals that are more difficult to visualize (Cheema & Bagchi, 2011).

In the goal pursuit context, CLT has been demonstrated to influence successful goal striving differently depending on distinct elements. For instance, specific goals help consumers save more when the savings goal is construed at an abstract level (e.g., save for retirement), whereas non-specific goals help consumers save more when the savings goal is construed at a concrete level (save \$100 per pay check) (Ülkümen & Cheema, 2011). Concreteness also varies according to mental level of construal. For example, as the purchase (or consumption act) draws closer, consumer goals become more concrete (Lee & Ariely, 2006). Regulatory focus interacts with consumers' mental level of construal and influence consumer's efficacy and recycling behaviors. Research has determined that loss (gain) frames are more effective at influencing self-efficacy and recycling behaviors when paired with low (high) construal level, more concrete (abstract) mindsets (White et al., 2011). In the following section, I explore how construal level mindset activation relates to the self-motives – construal level proposed framework.

2.6 Self-Motives and Mental Construal

"Self" versus "other" (people) research posits that one's views of their own self-characteristics, circumstances, actions and behaviors emphasizes concrete

contextual factors, while their views of others' self-characteristics, circumstances, actions and behaviors emphasize the role of general dispositions that stem from their personal values (Jones & Nisbett, 1987; Malle, 2005). This phenomena is known as the Actor-Observer Bias (Knobe & Malle, 2002). From the CLT perspective, the conjectures individuals make about their self-attributes, environments, engagements and behaviors demonstrate that a mindset focused on the self is consistent with a low-level of mental construal; conversely, a mindset focused on others is consistent with high-level mental construal (Liberman et al., 2007). For example, Libby and Eibach (2002) conducted an experiment in which participants who imagined performing an activity with a first person (*I*) perspective generated more vivid, detailed reports than those who imagined performing the same activity with the third person (*he, she*) perspective. This finding is convergent with CLT, which posits that a distant target, in this case a social target (others), is construed more abstractly (high CL) compared to a proximal social target (the self) (Liberman et al., 2007).

As mentioned previously, self-consistency essentially stems from an attempt to be consistent with one's actual-self (Elliott, 1986; Rosenberg, 1979), which refers to the individual's perceived reality of oneself (Aaker, 1999; Japutra et al., 2017). For instance, imagine a young mother named Grace who is raising her two kids by herself while aspiring to climb the corporate ladder. Grace's actual self-view (her actual self) is strongly rooted in traits such as "caring, responsible, and nurturing," instead of traits like "ambitious, business-like, leader." Just like Grace, individuals who are motivated to be self-consistent are more likely to exhibit a mindset that concerns their actual self-view. In other words, self-consistency motivates people to have a frame of mind that contains real experiences and happens here and now (Malär et al., 2011). Interestingly, consumers with a self-consistency mentality will present a low-level of

mental elaboration of constructs (Liberman et al., 2007, p. 358). For instance, Malär et al. (2011) suggests that consumers perceive their actual-self as more psychologically close compared to their ideal-self, which is more psychologically distant. Going back to Grace's example, when motivated to be self-consistent, she is more likely to focus on how (rather than why) to express the traits that are prominent in her current self-view (here and now), that is her view of herself as a "caring, responsible, and nurturing" person.

Conversely, self-enhancement places the focus on the ideal-self, which refers to one's optimal standards in any given identity (self-ascribed categorization people label themselves with; e.g., a parent, a scholar, an athlete, etc.) the individual holds (Aaker, 1999; Bettman & Escalas, 2005; Helm et al., 2015). Using Grace's example above, as a young mother aspiring to climb the corporate ladder, Grace's ideal selfview includes traits such as "hard-working, ambitious and productive." Because the ideal-self is not part of one's reality, as it refers to an ideal standard that is hardly ever achieved by the individual (Baumeister, 1998; Oyserman et al., 2006), the ideal-self is more psychologically distant (as it cannot be experienced because it is not part of one's reality) than the actual-self (Liberman et al., 2007), thus leading to a higher level of mental construal (Liberman, Trope, & Wakslak, 2007; Malär et al., 2011). Furthermore, it has been established that more distant self-representations (those in the future) are construed in a simpler and broader manner compared to selfrepresentations that are closer and in the present (Malär et al., 2011; Trope et al., 2007). Within this reasoning, and consistent with previous research in construal level theory and self-motives, I developed the following hypothesis:

H1: A self-enhancement mindset will lead consumers to higher levels of mental construal compared to a self-consistency mindset.

In the following section, I elaborate on the relationship between construal level mindset activation and self-control.

2.7 Construal Level Theory and Self-control

The way one mentally construes events and behaviors impacts their selfcontrol in subsequent actions (Fujita, 2008; Fujita et al., 2006). As previously stated, CLT (Trope & Liberman, 2000, 2003) states that high levels of mental construal, or those that are elaborated around essential, more abstract features of events and motives for actions, as to why something is necessary, have a stronger impact on behavior aimed at psychologically or temporally distant-future events. Conversely, low-level of mental construal, those that are elaborated around more concrete and incidental details of events and how to perform an action, bear greater impact on behaviors that are happening in the present or in the psychologically or temporally near future. Consistent with this reason, Liberman et al. (2002) noted that individuals give higher importance to high-level construal features, compared to low-level construal attributes, when considering distant future occurrences. The opposite pattern is observed when people are deliberating regarding near future events. In such instances, low-level construal aspects bear higher importance within one's choices. For example, when planning a wedding in the far future (one year away) a bride might be concerned with the emotional aspects of a venue (Does it seems romantic? Does it fit the "picture" of my ideal wedding day?). However, as the wedding day draws closer (a month away) other aspects come to attention (is it enough space for an elaborated first dance? Where can I add a desert buffet?).

Psychological distance is defined as the distance from the actual-self to any event or circumstances in the future or the past. The actual-self is a facet of the self-

concept that is always in the here and now (the present). Additionally, when considering someone else's actions, the psychological distance from our actual-self to this other entity influences our inferences (Trope & Liberman, 2010). For instance, when a mother is considering her child's behavior, there is a lot more detail and interest as to what is actually happening, and then the considerations as to why it is happening. Whereas when this same mother is considering a hypothetical child's behavior, the first thoughts are regarding why a child would behave in a certain way. Likewise, when thinking about a college fund for their own children, parents tend to very aware of the details involved in the proccess, but when thinking about the college fund as a important step to be taken by all parents, more though is given to the reasons why such a financial product is important.

Temporal distance is defined as the time distance between the present and a given occurrence in the past or in the future (Liu & Xu, 2015). An example of temporal distance is the time between today (the present) and the date one expects to receive a tax refund. Temporal distance is known for its inconsistent impact on financial behavior (Laran, 2010). For instance, participants in a private retirement plan (401K) recognize the importance of increasing their contributions in order to accumulate enough reserves for retirement age; however, they are more likely to commit to increases in the far future rather than the present or near future (Thaler & Benartzi, 2004).

Previous research suggests that temporal distance impacts self-control, in the sense that choices aimed at the far future tend to be oriented towards self-control, whereas choices targeting the present or near future are more likely to be focused on indulgence (Keinan & Kivetz, 2008; Kivetz & Keinan, 2006; Kivetz & Simonson, 2002). According to time discounting theory (Loewenstein, 1988), future outcomes

are usually discounted in comparison to immediate occurrences. The classic example of time discounting is the ill-fated "New Year's resolution," particularly those goals related to physical exercise. Typically, in early December, people commit to start an ambitious exercise regimen on January 1st (First). Gym memberships are signed, and workout gear is purchased. Because it will happen in the future, consumers tend to discount the actual effort that it takes to execute their workout plan. When the future becomes the present, and it is no longer a future-self commitment, but an actual-self one, there is a change in perspective. Research shows that in general most "New Year's Resolutions" related to physical activity are dropped around January 20th (Barr, 2020; Guinness, 2019; Waxman, 2020).

Research suggests that one of the mechanisms by which temporal distance impacts self-control is through temporal discounting (Prelec & Loewenstein, 1991, 1998). For instance, in their research, Prelec and Loewenstein (1991) concluded that in general, consumers tend to overweigh short-term rewards relative to more distant ones. This process of time-inconsistent preference is known as hyperbolic discounting, which is significantly relevant to self-control (Kim, 2005). Hyperbolic discounting involves the "immediacy effect," which implies that as consumption draws closer (distant), consumers are more likely to choose a vice (virtue) option (Liu & Xu, 2015; Malkoc & Zauberman, 2006; Read & Loewenstein, 1999). This phenomenon is relevant to the present research because it illustrates how a closer (distant) event or mindset impacts consumers' choice between indulgence (vice) or self-control (virtue) oriented alternatives. In this sense, I posit that consumers with a self-consistency (which is psychologically closer) mindset will present more indulgent financial behavior, whereas consumers with a self-enhancement (which is psychologically distant) frame of mind will exhibit more self-controlled financial
behavior. Fujita et al. (2006) expanded and connected the temporal distance to selfcontrol in regard to the aforementioned relationship with construal level theory. In a series of six experiments, they demonstrated that a high-level construal mindset positively impacts self-control in a myriad of contexts; for example, high construal level manipulation diminishes consumers' preferences for immediate (versus delayed) outcomes as well as leads to greater physical endurance and stronger intentions to resist temptations.

Goal distance (close versus far) bears impact on self-control activation (Fujita, 2011; Laran, 2010). The literature concerning self-control centers mainly in the effortful inhibition of impulses (Inzlicht et al., 2021). However, more recent studies present an avenue for self-control activation that does not rely in effortful selfrestraint. For instance, Fujita (2011) proposes that self-regulation may be activated through focusing on distant goals rather than on proximal ones. Through this alternative conceptualization, the act of self-regulation can take both effortful and labor-saving forms. Effortful forms of self-control in goal pursuit can be described as the deliberate action of engaging in goal related behaviors, involving inhibition, cognitive efforts and task-switching abilities. For example, a person with a goal to exercise can do so by willfully inhibiting the impulse to stay home and deliberately going to a gym or a jog outside (for a review see Hofmann, Schmeichel, and Baddeley, 2012). Such effortful self-regulatory processes can be negatively affected by several circumstances such as simultaneously engaging in a cognitively challenging task (Muraven et al., 1998) or exerting self-control in an unrelated prior task (Baumeister et al., 1998). In fact, the simple act of engaging in the selected effortful task (physical exercise in this example) is enough to diminish self-regulatory processes (Vohs et al., 2008).

Goal pursuit motivation might be enhanced by triggering a higher level of mental construal, compared to a lower level of mental construal (Fujita, 2011). For instance, an alternative to the effortful strategy for increasing exercise described above can be achieved by shifting focus from proximal goals (or events) to distal ones. For instance, in an experiment, Fujita and Han (2009) established that participants who focus on abstract goals (e.g., being healthy) were more likely to choose apples over candy. Conversely, participants focused on more concrete goals (e.g., eating a tasty treat) were more likely to choose candy over apples. Simply put, focusing on abstract versus concrete goals appears to positively impact the choice for goal-congruent behaviors (Rivers et al., 2017). Henceforth, the self-control dilemma can be exemplified within the motivation perspective as the choice between two distinct motives: consumers can choose the concrete and immediate reward (e.g., eating a pastry), which is most likely smaller than their second motive: a more abstract, further in the future reward (e.g., achieving a healthy body weight). Interestingly, research into the effects of exerting self-control on subsequent decision making have uncovered that depletion of self-control prompts consumers to a lower mental level of construal, which might explain their focus on resources and protective products (Lisjak & Lee, 2014), as well as their more indulgent subsequent choices (Wan & Agrawal, 2011).

The present research centers on financial decision making. As such, I chose financial decision making scenarios to test the suggested effect of self-motives on behavior intentions. Specifically, I examined the effects of self-enhancement and selfconsistency motivations on savings intentions and willingness to go into debt. Savings intentions was chosen as a dependent variable given the fact that, even though saving money is a common goal among Americans (Ülkümen & Cheema, 2011), 90% of

Americans feel they are not on track with their retirement savings (Federal Reserve, 2018). Willingness to go into debt was chosen as a dependent variable given its importance to consumer financial well-being (Federal Reserve, 2020). Recent data indicate that eight in ten Americans have at least one credit card and over 45% of American households carry a credit card balance, totaling over \$700 billion in outstanding credit card debt (Federal Reserve, 2020b; Federal Reserve Bank of New York, 2021).

As described in the previous section (2.6), given that consumers perceive their ideal self as psychologically far (as something taking place in a distant future), I predict that a self-enhancement mindset should trigger a higher level of mental construal. Conversely, because consumers perceive their actual self as psychologically close (something taking place in the here and now), a self-consistency mindset should elicit a lower level of mental construal (H1). Additionally, consistent with the literature on temporal distance, consumers tend to display higher self-control for activities construed in a distant future compared to closer occurrences (Frederick et al., 2002). Lastly, research has demonstrated that the construal level mindset impacts self-control, so that a higher level of mental construal (Fujita, 2008; Fujita & Carnevale, 2012; MacGregor et al., 2017). Following this reasoning and consistent with the literature on psychologic and temporal distance, construal level, and self-control, I developed the following hypotheses:

H2: A self-enhancement mindset will lead consumers to greater savings intentions than will a self-consistency mindset.

H3: Mental level of construal mediates the relationship of self-motive mindset and savings intentions.

H4: A self-enhancement mindset will lead consumers to lesser credit card debt behavior than will a self-consistency mindset.

H5: Mental level of construal mediates the relationship of self-motive mindset and willingness to go into debt.

Below I explore the relationship between future-self connectednessn and self-control and its proposed moderation effect on the self-motives to financial behavior relationship.

2.8 Future Self and Self-control

2.8.1 Future Self

Similar to the ideal self, the future self is another facet of the self-concept with important implications for self-control. One of the hallmarks of self-control is the ability to delay gratification (Romero et al., 2019). In the classic "marshmallow experiment" (Mischel & Ebbesen, 1970), psychologists observed how pre-school children (three to five years old) reacted in the face of a choice: a smaller present reward or a doubled future reward. The researchers followed the children throughout nineteen years after the experiment and concluded that this type of future-oriented self-control greatly impacted the participants' overall well-being. For instance, children who were able to delay gratification achieved higher academic scores, developed better social and cognitive skills, and displayed superior aptitude to deal with frustration and stress (Mischel et al., 1989).

The results of the Marshmallow experiment can be viewed as individuals exercising self-control in response to consideration of the future self as

psychologically close or distant. For instance, when one thinks about themselves in the future, there is a negotiation between the present-self and the future-self (Hershfield & Bartels, 2018). These high-conflict choice models can result in failure to delay gratification, which is usually credited to the more powerful status the present-self holds (over the future-self) in such negotiations (Bartels & Rips, 2010; Bazerman et al., 1998). The act of thinking about one's future-self is a concept psychologists and social scientists refer to as "prospection" (Gilbert & Wilson, 2007). Prospection literature, which refers to the human ability to "pre-experience" the future by simulating it through imagination (Allen, 2019), borrows on James's (1890) assertion that "thinking is for doing," in the sense that one's behavior today is largely impacted by the view they hold regarding their future-selves (Baumeister et al., 2016). The future-self encompasses who individuals might become (the expected-self), as well as who they are afraid to become (the feared-self) (Markus & Nurius, 1986; Oyserman et al., 2006; Quinlan et al., 2006). Although the future-self could potentially overlap with the ideal-self, this is not necessarily the case. For instance, imagine a young man who has struggled with his weight since childhood. He has tried several weight-loss programs, but he lacks the discipline to be consistent with the weight loss regiments. In his ideal vision of himself, he would have a healthy weight and an athletic body figure. However, when questioned about how he believes his weight will be in five or ten years, he admits that it is unlikely to change. This is an example of a dimension in which the ideal-self (healthy weight individual) and the future-self (over-weight person) do not overlap. To illustrate the same concept within the financial behavior domain, think about a middle-aged woman who has managed to afford a middle-class lifestyle through long hours of hard work. In her ideal vision of herself, she would be able to "slow-down" her working hours to relax and enjoy time

with family. However, when questioned if she believes her finances will allow her to reduce her workload five years from now, she recognizes that, although she will be better off financially in the future (Berman et al., 2016³), it is unlikely to be enough to reduce the work load as much as she would like.

According to the philosopher Derek Parfit (1984), the future-self can be addressed as a different person, for whom one's care and concerns depend directly on the psychological connection between the present-self and the future self. In fact, Parfit states that "since connectedness is nearly always weaker over longer periods, I can rationally care less about my further future" (Parfit, 1984, p.313). In other words, the more temporally distant a particular future-self is perceived to be, the weaker will be the person's psychological connection to that future-self. In line with this reasoning, Parfit argues that decisions concerning intertemporal choices (e.g., consumption now or later) and utility discounting (trading a reward in the future for a smaller reward in the present) depends not only on the temporal distance between the contemplated alternatives, but also on the perceived continuity between one's present and future selves (Bartels & Urminsky, 2011). Such a psychological connection is further explained as the similarity among lifetime stages (Perry, 1972) along with the stability of certain aspects that form one's core identity, such as personality (Lewis, 1983) temperament, major likes and dislikes, values, life goals, and ideals (Unger, 1992).

The literature in regards to the future-self construct posits that people may view themselves in the future as a separate entity (Cross & Markus, 1991; Parfit, 1971; Paul, 2014). Research shows that when imagining a birthday in the far

³ According to Berman et al. (2016), even though consumers usually report financial constraint in the present, they consistently predict they will be better off financially in the future, regardless of the absence of any evidence of such improvement.

(compared to the near) future, participants were more likely to refer to themselves in the third person (*he, she*) (Pronin & Ross, 2006). Furthermore, thinking about oneself ten years in the future prompts a similar neural pattern of thinking about another person, whereas thinking about oneself in the present elicits a different neural pattern (Pronin et al., 2008). Even more interesting, Molouki and Bartels (2020) demonstrated that when deciding for other people, participants allocate similar values on variables such as need, liking, and deservingness as when deciding for themselves in the future. However, they assign different worth to these same variables when deciding for themselves in the present.

2.8.2 Future self and self-control

The notion that consumers tend to see their future-selves as a separated persona is important; it helps researchers understand the reason consumers tend to choose smaller rewards in the present or immediate future instead of larger benefits to be received in the far future (Hoch & Loewenstein, 1991; Prelec & Loewenstein, 1991, 1998). For instance, consider a young professional named Hope who has just been notified that she will receive a bonus in 30 days. When Hope first learns about the bonus, saving a big portion of it for retirement seems like a good idea (Hopkins, 2019; Rosa, 2019). However, when the funds are deposited into her account, she realizes how much she "needs" a getaway weekend and how she "deserves" the latest I-Phone. When the financial decision is towards the future (30 days before receiving the bonus), the pleasure of the indulgencies was discounted. However, when Hope has the opportunity to indulge her present-self, even at the expense of her future-self, she chooses a smaller present reward versus the long-term investment, which would cause the funds to be worth much more after years of compounded

growth (National Endowment For Financial Education, 2020). Just like Hope, only five out of ten Americans who pre-commit to saving a future gain actually follow through with their original savings plan (Center for Advanced Hindsight, 2017).

The degree to which one might discount future rewards (compared to immediate one) are related to the degree of continuity they perceive between their present selves and their future selves (Hershfield & Bartels, 2018). Since one's futureself might be perceived by an individual as a different person, the connection consumers have with their future selves varies. A stronger connection to one's futureself positively impacts consumer financial behavior (Bartels & Urminsky, 2011, 2015; Ellen et al., 2012; Hershfield et al., 2011; Laran, 2010). For instance, Hershfield et al (2009) assert that consumers who feel more connected to their future selves accumulate more assets over a period of time (10-75 days). Specifically, Bartels and Urminsky (2011) suggest that experimentally manipulating perceived connection to one's future-self (e.g., by telling people that their identity is likely to remain stable (unstable) over time) impacts individuals' willingness to delay gratification. Simply put, a higher connection to one's future-self makes them more patient to wait for financial rewards. Research in other domains corroborates that a higher connection to one's future-self positively impacts self-control. For instance, higher connection to one's future-self decreases procrastination (Blouin-Hudon & Pychyl, 2015) and leads to more physical activity (Rutchick et al., 2018). Furthermore, according to Laran (2010), choices made concerning the future-self are more focused on self-control when compared to choices made with the present-self in mind.

Financial decision making is heavily impacted by the ability to delay gratification (Romero et al., 2019), which is a consequence of self-control (Haws et al., 2016). In fact, throughout the extensive literature in the self-control construct, the

most prevalent definition of self-control is the preference for larger delayed rewards over smaller immediate ones (Ainslie, 1975; Hoch & Loewenstein, 1991; Kirby & Herrnstein, 1995; Mischel & Underwood, 1974). Therefore, self-control is a major antecedent of financial decision making (Vohs & Faber, 2007). As hypothesized in the previous sections (2.6 and 2.7), given that consumers perceive their ideal-self as psychologically far (as something taking place in a distant future), and their actualself as psychologically close (something taking place in the here and now), I predict that a self-enhancement mindset should trigger a higher level of mental construal, whereas a self-consistency mindset should elicit a lower level of mental construal (H1). Further, I hypothesized that a self-enhancement mindset should heighten selfcontrol, through its effect on construal level mindset activation, and lead to behavior intentions that favor self-control. Conversely, a self-consistency mindset should hinder self-control (through its effect on construal level mindset activation) and in consequence, lead to more indulgent behavior intentions (H2 through H5). Consistent with the literature that shows that a higher connection with the future-self increases the ability to delay gratification (Bartels & Urminsky, 2011, 2015; Ellen et al., 2012; Hershfield et al., 2011), I developed the following hypotheses:

H6a: For self-consistency mindset consumers, a strong (compared to a weak)
psychological connection with the future-self will increase savings intentions.
H6b: For self-enhancement mindset consumers, the level of psychological
connection with the future-self will not be associated with savings behavior.
H7a: For self-consistency mindset consumers, a strong (compared to a weak)
psychological connection with the future-self will be associated with lesser
credit card debt behavior.

H7b: For self-enhancement mindset consumers, the level of psychological connection with the future-self will not be associated with credit card debt behavior.

Figure A.

Conceptual Framework



CHAPTER 3: STUDIES

3.1 Overview of Studies

This section presents ten studies aimed at evaluating whether distinct selfmotives elicit different levels of mental construal, ultimately influencing participants' self-control-oriented financial behavior. To prompt self-motives (self-enhancement and self-consistency), I made certain facets of participants' self-concept accessible. Specifically, participants who were made aware of their ideal self were expected to be motivated to self-enhance, whereas participants who were made aware of their actual self were expected to be motivated to maintain self-consistency. In line with previous research that has largely relied on self-discrepancy to elicit concepts related to the self-concept (Angelis et al., 2012; Chatterjee et al., 2013; Cooper & Thatcher, 2010; Gebauer et al., 2017; Madon et al., 2008; Valenzuela et al., 2018), the first set of five studies were conducted with a manipulation that induced participants to experience self-discrepancy within their actual-self (self-consistency motive) or their ideal-self (self-enhancement motive).

In Study 1, I sought to determine if self-enhancement motives lead to a highlevel of mental construal, whereas self-consistency motives lead to a low level of mental construal (H1). Studies 2a and 2b investigated whether self-enhancement motives lead to higher savings intentions, whereas self-consistency motives lead to lower savings intentions (H2).

Study 3 tested the proposed mediation effect, that is, construal level mindset activation mediates the self-motive to financial behavior relationship (H3). Study 4 was an approximate replication of Study 3, but with a distinct financial behavior: Willingness to go into debt (WTGID). Specifically, study 4 examined the relationship among certain self-motives (self-enhancement vs. self-consistency) with willingness to go into debt (H4), as well as its suggested underlying mechanism, construal-level

mindset activation (H5). Finally, study 5 sought to assess the moderating effect of connectedness to future-self within the effects of self-motives in willingness to go into debt (H7a and H7b).

According to objective self-awareness theory (Silvia & Duval, 2001), the simple act of reflecting upon one's self should initiate an automatic process of comparison of the self against standards. Such comparisons tend to stimulate motivation to reduce self-discrepancies between the self facet under consideration and one's standard. In other words, focusing one's attention on a particular facet of their self-concept is enough to induce motivation (Leary & Tangney, 2012). Indeed, the premise that "thinking is for doing⁴" (Oyserman et al., 2012) suggests that implicit self-motives may operate unconsciously (Devos et al., 2012) and influence selfknowledge (Showers & Zeigler-Hill, 2012). Accordingly, I set out to investigate if the mere act of reflecting upon a possible-self (i.e., ideal-self vs. actual-self), would be enough to spark the correspondent self-motive (i.e., self-enhancement vs. selfconsistency). In this sense, and consistent with the hypothesized effect on H1, the act of reflecting upon a facet of the self-concept (in this case a particular possible-self) would be enough to lead participants to a specific mental level of construal and ultimately impact financial behavior (hyposthesized effects of H2 through H7). To test this self-motives' manipulation, which does not include placing participants in a obvious self-discrepancy state, a set of five studies without self-discrepancy manipulation were conducted and are described as follows.

⁴ "Thinking is for doing" is a contraction of the term first used by the philosopher William James "My thinking is first and last and always for the sake of my doing" (James, 1890), meaning that the act of thinking (about anything, specially facets of the self-concept) is with the primary purpose of acting on the thought.

In study 6, I sought to determine if reflecting on a facet of the self-concept would elicit the correspondent self-motive, without the presence of an ostensive manipulation of self-discrepancy. Specifically, participants in the self-enhancement condition were prompted to reflect upon their ideal-self. Conversely, those in the selfconsistency condition were lead to reflect upon their actual-self. As in study 1, selfenhancement motives were expected to lead to higher level of mental construal, compared to self-consistency motives, which should lead to a low level of mental construal (H1). Study 7 sought to test whether self-enhancement motives lead to more self-control-oriented behavior (higher savings intentions) and if self-consistency motives lead to more indulgence-oriented behavior (lower savings intentions - H2). Additionally, this study aimed to establish the mediation role of construal-level mindset activation within the self-concept motives to savings behavior relationship (H3). Study 8 was a replication of study 7 but with a non-student sample (AM Turk).

Study 9 was a replication of studies seven and eight but with a distinct financial behavior: instead of savings intentions, willingness to go into debt (WTGID) was the dependent variable (H4 and H5). Study 10 tested the hypothesized future-self connection moderation effect using savings intentions as the dependent variable. Specifically, study ten investigated whether a connection to one's future self moderates the relationship between self-motive and savings intentions (H6a and H6b). Table 2 depicts a summary of the hypotheses test results per study.

Table 2.

Summary of the Hypotheses Test Results per Study.

Study	Hypothesis tested	Sample (N and source)	Result
Study 1	H1 \rightarrow A self-enhancement mindset will lead consumers to higher levels of mental construal compared to a self- consistency mindset	N=62; FIU students	Hypothesis 1 supported
Study 2a	H2 \rightarrow A self-enhancement (self-consistency) mindset will lead consumers to greater (lesser) savings intentions	N=172; FIU students	Hypothesis 2 supported. No significant difference in savings intentions for neither of the self-motive condisitons, compared to the control condition.
Study 2b	H2 \rightarrow A self-enhancement (self-consistency) mindset will lead consumers to greater (lesser) savings intentions	N=110; FIU students	Hypothesis 2 supported. Participants in the self-enhancement condition reported marginally significantly higher savings intentions than their counterparts in the control condition.
Study 3	H3→ Mental construal mediates the relationship of self- motive mindset and savings intentions	N=147; FIU students	Hypothesis 3 supported
Study 4	 H4 → A self-enhancement (self-consistency) mindset will lead consumers to lesser (greater) credit card debt behavior H5→ Mental construal mediates the relationship of self- motive mindset and credit card debt behavior 	N=266 Qualtrics paid panel	Hypotheses 4 and 5 supported

Study 5	 H7a → For self-consistency mindset consumers, a strong (comapred to a weak) psychological connection with the future self will be associated with lesser credit card debt behavior. H7b → For self-enhancement mindset consumers, the level of psychological connection with the future self will not be associated with credit card debt behavior. 	N=253 Qualtrics paid panel	Hypothesis 7a not supported. Hypothesis 7b supported
Study 6	H1 \rightarrow A self-enhancement mindset will lead consumers to higher levels of mental construal compared to a self- consistency mindset	N=211; FIU students	Hypothesis 1 supported
Study 7	 H2 → A self-enhancement (self-consistency) mindset will lead consumers to greater (lesser) savings intentions H3→ Mental construal mediates the relationship of self-motive mindset and savings intentions 	N=267; FIU students	Hypotheses 2 and 3 supported
Study 8	 H2 → A self-enhancement (self-consistency) mindset will lead consumers to greater (lesser) savings intentions H3→ Mental construal mediates the relationship of self-motive mindset and savings intentions 	N=274; MTurk workers	Hypotheses 2 and 3 supported
Study 9	 H4 → A self-enhancement (self-consistency) mindset will lead consumers to lesser (greater) credit card debt behavior H5→ Mental construal mediates the relationship of self-motive mindset and credit card debt behavior 	N=239; FIU students	Hypotheses 4 and 5 supported

Study 10	 H6a→ For self-consistency mindset consumers, a stronger (compared to a weak) psychological connection with the future self will increase savings intentions. H6b→ For self-enhancement mindset consumers, the level of psychological connection with the future self will 	N=199; FIU students	Hypotheses 6a and 6b supported
	not be associated with savings intentions		

3.2 Study 1

This study aimed to test the hypothesized effect of self-motives on participants' mental level of construal (H1). Study 1 was an experiment in which I manipulated participants' self-motive, either self-consistency or self-enhancement, and measured participants construal level using a modified version of the Behavioral Identification Form – BIF (Sinha & Lu, 2019a). This measure has been largely used in marketing and psychology to measure differences in mental level of construal (Sinha & Lu, 2019; Soman & Cheema, 2011; Ülkümen & Cheema, 2011). Lastly, participants answered questions pertaining to demographics and demand artifacts.

3.2.1 Participants and Design

The sample for this study consisted of FIU marketing students who were recruited via SONA (internal FIU research system) and voluntarily completed the experiment in exchange for course credit. Based on the generally accepted power of .80 in psychology (Dattalo, 2008), a power analysis conducted using G*Power v3.1 (Faul et al., 2007) to achieve power to detect a large effect of .50 at an alpha level .05 indicates a sample size of 57 is adequate for this analysis. Accordingly, 62 FIU marketing students (71% female, $M_{age} = 23.4$) were recruited via SONA (internal FIU research system) and randomly assigned (at the beginning of the survey, through Qualtrics randomization protocols) to one of three conditions (groups) in a single factor (self-motives: self-enhancement n=19 vs. self-consistency n=21 vs. control n=22) between subject design. Participants were not aware of the different conditions in the study.

3.2.2 Procedure

This study, including its cover story, manipulations, battery of measures and demographic questions was administered at the Florida International University behavioral lab using a Qualtrics web survey. This data was collected over the course of two days (November 4th and 5th, 2019). To the best of my knowledge there were no adverse conditions during the data collection period. Upon starting the survey, participants answered an attention check question that asked them to select the response option "not at all carefully" if they read the question instructions. Fourteen (14) participants failed the attention screening. The data was analyzed with and without these participants, and <u>no change</u> was observed in the significance of the results. I report here the analysis with the whole sample (N = 62).

Next, participants read the cover story corresponding to their assigned condition (self-enhancement vs. self-consistency vs. control) followed by the correspondent's self-motive condition task or neutral (control condition) task. To place participants in a stronger motivational state, they were induced via a second writing task to focus on their self-discrepancy with their actual-self standards to activate a self-consistency motive or with their ideal-self standard to activate a selfenhancement motive (Higgins, 1989; Mandel et al., 2017; Sedikides, 1993). Then, participants completed the self-concept motive manipulation check.

Subsequently, they read a cover story for the construal level measurement task which informed them that the first study had been completed. Moreover, participants were advised they would participate in an unrelated research study about how people think differently regarding any given behavior. After the construal level measurement task, participants completed demographic information (gender, age, income, ethnicity) and were debriefed and thanked.

3.2.3 Manipulations

The manipulation instructions for all three conditions assured participants of anonymity and asked them to provide truthful and honest answers. In the control condition, the cover story welcomed participants to the "*Daily Activities*" study. The instructions asked them to describe their last trip to the grocery store by typing about it in a short essay form box in Qualtrics (adapted from Kim and Gal, 2014).

"Please think about your last trip to a grocery store. Describe it in the space below. Please be as descriptive as possible about the situation: When was it? What were you thinking about buying? What was your list like (if you had one)? What did you buy? How was the shopping experience?"

In the self-motive conditions, the cover story welcomed participants to the "*Academic Performance*" study and then the instructions asked them to think and write about a certain aspect of their self-concept. To prime a specific self-concept motive, the writing task was designed to increase the accessibility of the self-concept facet associated with the particular self-motive. Thus, to prime the self-consistency motive the manipulation involved a writing task that increased the cognitive accessibility of participants' actual self (Swann et al., 1992). Similarly, the self enhancement manipulation increased cognitive accessibility of participants' ideal self (Sedikides, 1993).

The self-concept motive manipulation instructions asked participants to think about and list traits of the type of students they are (actual self – self-consistency condition) **or** desire to be ideally (ideal self – self enhancement):

"Please describe the actual (ideal) type of student you are (would like to be). Please be specific in your description, including details such as GPA, preparation time before exams, class performance and behavior as well as anything else you consider describes you as an actual (ideal) student. Now, please list 5–10 of your actual (ideal) student traits in the spaces provided below."⁵

The survey contained 10 entry forms allowing participants to complete the sentence "As an actual (ideal) student, I..." with the traits they believe to possess.

Self-discrepancy has been largely adopted as a manipulation of self-concept related constructs (Angelis et al., 2012; Chatterjee et al., 2013; Cooper & Thatcher, 2010; Gebauer et al., 2017; Madon et al., 2008; Valenzuela et al., 2018). Accordingly, this study relied on a self-discrepancy manipulation. The instructions asked participants to think and write about a time when they failed to live up to their actual (ideal) standards as a student:

"Now please think about a time in which you <u>failed</u> to live up to your actual (ideal) standards as a student. Describe it in the space below. Please be as descriptive as possible about the situation: When was it? What happened? How did you fail to meet your actual (ideal) student standards? How did you feel at that time? How does recalling this experience make you feel?"

3.2.4 Measures

The self-discrepancy manipulation check consisted of a single item, "*How* close or far were you from reaching your [actual/ideal] student self in the situation

⁵ Description of the two self-motives manipulations with parentheses indicating separate conditions

you just described? "The seven-point response scale was anchored by "Very far" (1) and "Very close" (7).

This study implemented a modified version of the Behavioral Identification Form - BIF (Sinha & Lu, 2019a), which has been largely adopted as a measure of differences in construal level (Nira Liberman & Trope, 1998; Ülkümen & Cheema, 2011; Vallacher & Wegner, 1989). The instructions, which were divided with fourpage breaks (indicated by a dashed line below) in the web survey, were:

Any behavior can be identified in many ways. For example, one person might describe the behavior as 'typing a paper', while another might describe the behavior as pushing keys on the keyboard. Yet, another person might describe the behavior as 'expressing thoughts'.

We are interested in your personal preferences for how a number of different behaviors should be described. On the following screens you will find several different behaviors listed. After each behavior will be two choices of different ways in which the behavior might be identified.

Here is an example:

1. Attending class

sitting in a chair						learnin	ig new
concepts							
1	2	3	4	5	6	7	

Your task is to choose the identification, from 1 to 7, that best describes the behavior for you.

Of course, there are no right or wrong answers. People simply differ in their preferences for the different behavior descriptions, and we are interested in your personal preferences.

Be sure to mark your choice for each behavior. Remember, choose the description that you personally believe is more appropriate for describing each behavior.

Then participants rated their perceived construal level for ten actions (e.g., cleaning the house) by rating the extent to which they would describe each action with either a low (vacuuming the floor) or high-level (showing one's cleanliness) construal. The ten items were combined to form a unified BIF index ($\alpha = .78$, *Mean* = 5.13, *SD* = 1.05).

3.2.5 Results

3.2.5.1 Manipulation Check. The self-motives manipulation check was the self-discrepancy measure, which asked participants how far were they from achieving their ideal (for the self-enhancement condition) or actual (for the self-consistency condition) stardards as a student in the self-faillure situation they had report. Two one-sample t-tests were conducted for the self-enhancement group and the self-consistency group. The self-discrepancy measure was the dependent variable and the

scale neutral point (4) was the test value⁶. A successful manipulation requires that the average self-discrepancy rating be at or below neutral to indicate that the participant perceived a psychological distance with their actual (self-consistency condition) or ideal (self-enhancement condition) self. The results show that both self-motive conditions resulted in self-discrepancy scores at the neutral level (4) or below it ($M_{self-enhancement} = 3.74$, t (1,18) = -.641, p= .530; $M_{self-consistency} = 3.90$ t (1,20) = -.237, p= .815⁷); thus, the self-motive manipulation was successful.

Further, an independent samples T-test revealed no significant difference in self-discrepancy scores between self-enhancement and self-consistency (t (1,38) = – .292, p >.772) conditions, denoting that both self-motive manipulations induced the same extent of self-discrepancy in both groups. As indicated by the self-discrepancy manipulation check described above, participants in both self-motives conditions reported threats to their actual-self (self-consistency condition) or their ideal-self (self-enhancement condition), denoting that the self-motive manipulation indeed placed participants in a self-discrepancy state, and as such was successful.

3.2.5.2 Mental Construal Level Activation. I conducted a ONE-WAY

ANOVA with the averaged BIF_Index as the dependent variable and condition (selfenhancement vs. self-consistency vs. control) as the factor. The following results, presented in table 3, are convergent with H1. Self-motives impacted participants' construal level significantly, as showed by the omnibus test (F(2,61) = 8.47, p < .05), such that participants in the self-enhancement (M_self-enhancement = 5.68) and control

⁶ The point 4 on the scale reads "neither far, nor close".

⁷ A non-significant p value denotes that the self-discrepancy rates for each group did not significantly differ from the neutral level of self discrepancy (test value, 4).

 $(M_{control} = 5.32)$ conditions presented a higher construal level compared to participants in the self-consistency condition ($M_{self-consistency} = 4.43$). An analysis of effect size from means using G*Power v3.1 (Faul et al. 2007) revealed that the effect size detected is robust (effect size f =.53). A post-hoc analysis of achieved power was conducted using G*Power v3.1 (Faul et al. 2007) and revealed the achieved power for the analysis was β = .96.

The planned comparison test revealed that the control and self-enhancement conditions did not significantly differ (t = -1.18 p = .24); however, the control and self-consistency conditions significantly differ among each other (t = 2.95 p < .05); likewise both self-motive conditions did significantly differ from each other (t = 4.01 p < .05). Thus, I can infer that self-consistency motives significantly impact participants' mental level of construal, compared to the control condition. Additionally, the results show that both self-motives impact mental level of construal significantly differently. As predicted, a self-enhancement motive leads to a significantly higher level of construal, compared to a self-consistency motive, which provides support for H1.

Table 3.

Study 1 Results

					95% Co	nfidence		
					Interval	for Mean		
			Std.	Std.	Lower	Upper		
	Ν	Mean	Deviation	Error	Bound	Bound	Minimum	Maximum
Self-enhancement	19	5.68	.87	.20	5.27	6.10	4.30	7.00
Self-consistency	21	4.43	1.09	.24	3.93	4.93	3.00	6.20
control	22	5.32	.98	.21	4.88	5.75	3.30	7.00
Total	62	5.13	1.10	.14	4.85	5.41	3.00	7.00

Study 1 Descriptive Statistics

Study 1 ANOVA

	df	Mean Square	F	Sig.
Between Groups	2	8.473	8.691	.000
Within Groups	59	.975		
Total	61			

		Value of			Sig. (2-		
		Contrast	Contrast	Std. Error	t	df	tailed)
CLM	Assume equal	1	1.2556	.31263	4.016	59	.000
	variances	2	3660	.30924	-1.184	59	.241
		3	.8896	.30123	2.953	59	.005
	Does not assume	1	1.2556	.31020	4.048	37.411	.000
	equal variances	2	3660	.28854	-1.269	38.972	.212
		3	.8896	.31683	2.808	40.055	.008

Study 1 Contrast Tests

3.2.6 Discussion

Taken together, the results support the predicted H1's effect that a selfenhancement mindset leads consumers to a higher level of mental construal, and a self-consistency mindset leads consumers to a lower level of mental construal. Previous research has shown how certain psychological states (conditions) such as regulatory focus (Lee et al., 2009; Park & Morton, 2015; White et al., 2011), concreteness (Lee & Ariely, 2006) and specificity (Ülkümen & Cheema, 2011) impact consumers' level of mental construal. The present research adds to this body of work by highlighting how certain self-motives (i.e., self-enhancement and selfconsistency) bears influence over consumers' mental level of construal. I followed the work of Angelis et al., (2012); Chatterjee et al., (2013); Cooper & Thatcher (2010); Gebauer et al., (2017); Madon et al., (2008); and Valenzuela et al., (2018) and manipulated participants' self-motive by indulcing them to a selfdiscrepancy state. Subsequently I measured their mental level of construal and detected a significant difference among the self-enhancement and the self-consistency groups. A shortcoming of using evident self-discrepancy as a means for manipulating participants self-motives is that in some instances it might not be easy to induce consumers to a self-discrepacy state, especially self-discrepacy from their actual-self. I aim to address this weakness in studies four through nine.

Although the sample size for this study was just about the number required to detect a large effect size (.50; N=62), an analysis of effect size from means showed that the effect size detected was robust (effect size f =.53). In the next study, I investigated the effect of self-motives on a financial behavior, namely willingness to save (savings intentions).

3.3 Study 2A

This study aimed to test the predicted effects of H2, that is, the differential impact of self-consistency versus self-enhancement mindsets on financial behavior. Study 2a was an experiment in which I manipulated participants' self-motive, either self-consistency or self-enhancement, and examined its effect on willingness to save⁸.

⁸ Savings intentions were chosen as the dependent variable given the fact that, even though saving money is a common goal among Americans (Ülkümen & Cheema, 2011), 90% of Americans feel they are not on track with their retirement savings (Federal Reserve, 2018).

3.3.1 Participants and Design

The sample for this study consisted of FIU marketing students, who were recruited via SONA (internal FIU research system) and voluntarily completed the experiment in exchange for course credit. Based on the generally accepted power of .80 in psychology (Dattalo, 2008), a power analysis conducted using G*Power v3.1 (Faul et al., 2007) to achieve power to detect a large effect of .40 at an alpha level .05 indicates a sample size of 137 is adequate for this analysis. In order to account for unusable data, 172 FIU marketing students (58% female, $M_{age} = 21.8$) were recruited via SONA (internal FIU research system) and randomly assigned (at the beggining of the survey, through Qualtrics randomization protocols) to one of three conditions (groups) in a single factor (self-motives: self-enhancement (n=60) vs. self-consistency (n=54) vs. control (n=58) between subjects design. Participants were not aware of the different conditions in the study. To the best of my knowledge there were no adverse conditions during the data collection period.

3.3.2 Procedure

This study, including its cover story, manipulations, battery of measures and demographic questions was administered at the Florida International University behavioral lab using a Qualtrics web survey. This data was collected over the course of two days (November 18th and 19th, 2019). First, participants answered the same attention check question used on study 1. Twenty eight (28) participants failed the attention screening. The data was analyzed with and without these participants, and <u>no change</u> in the significance of the results was observed. Thus, I report the analysis with the whole sample (N = 172).

The stimuli used to manipulate self-concept motive mindsets were identical to Study 1. Immediately after the self-motive manipulation check (self-discrepancy). I measured the dependent variable: participants' savings intentions (adapted from Garbinsky et al., 2014). Participants then responded to manipulation checks as well as a modified version of the BIF (Sinha & Lu, 2019, 10 items combined to form a unified BIF index ($\alpha = .74$, *Mean* = 4.98, *SD* = 1.10).

Subsequently, they answered the tightwad – spendthrift scale (Rick et al., 2008), which measures individual differences in savings and spending patterns. This variable was used as a statistical control, since individual differences in savings and spending patterns are known to influence savings intentions (Rick et al., 2008; Thomas et al., 2011). After completing the tightwad-spendthrift scale, participants completed demographic information (gender, age, income, ethnicity). Finally, they were thanked and debriefed.

3.3.3 Measures

To measure savings intentions, which was administered immediately after the self-motive manipulation check (self-discrepancy), participants responded to the following item using a 0 to 100 slider scale with five-unit intervals:

"Imagine that you were just awarded \$100.00 for participating in this study. With this in mind, please indicate how much of this money would you be willing to put away on a savings account for a future purchase or for some unexpected emergency?" (adapted from Garbinsky et al., 2014).

This study implemented the tightwad-spendthrift scale (Rick et al., 2008), which has been largely adopted as a measure of chronic differences in spending

preferences (Berman et al., 2016; Thomas et al., 2011). This variable was included as a statistical control, since individual differences in savings and spending patterns are known to influence savings intentions (Rick et al., 2008; Thomas et al., 2011). The scale consists of four items concerning one's spending patterns such as:

"Some people have trouble limiting their spending: They often spend money – for example on clothes, meals, vacations, phone call – when they would do better not to.

Other people have trouble spending money. Perhaps because spending money makes them anxious, they often don't spend money on things they should spend it on.

How well does the first (second) description fits you?"

The four scale items were averaged to form a single index (α = .76, *Mean* = 2.97, *SD* =.71).

3.3.5 Results

3.3.5.1 Manipulation Check. Similar to study 1, two one-sample t-tests were conducted for the self-enhancement group and the self-consistency group. The self-discrepancy manipulation check measure was the dependent variable and the scale neutral point (4) was the test value⁹. The results show that both self-motive conditions resulted in self-discrepancy scores at the neutral level (4) or below it (M_self-enhancement = 3.49, t (1,66) = -2.251, p= .028; M_self-consistency = 3.86, t (1,56) = -.543, p= .589¹⁰);

⁹ The point 4 on the scale reads "neither far, nor close".

¹⁰ A non-significant p value denotes that the self-discrepancy rates for each group did not significantly differ from the neutral level of self discrepancy (test value, 4).

thus, since both self-concept motive manipulations lead to an average selfdiscrepancy rating at or below the neutral level (4), the self-motive manipulation was successful.

Further, an independent samples T-test revealed no significant difference in self-discrepancy scores between self-enhancement and self-consistency (t (1,122) = – 1.076, p >.284), denoting that both self-motive manipulations induced the same extent of self-discrepancy in both groups, indicating that the self-motive manipulation was successful.

3.3.5.2 Savings intentions. I conducted a ONE-WAY ANCOVA with tightwad-spendthrift scores, income, gender and reported savings as covariates, savings intentions as the dependent variable and self-concept motive / control condition (self-consistency vs. self-enhancement vs. control) as the between-subjects factor. The results, presented in table 4, revealed a statistically significant effect of self-motives on savings intentions (F(6,165) = 2.63, p = .018); convergent with H2, those in the self-enhancement condition ($M_{self-enhancement} = 67.28$, $M_{self-consistency} = 52.39 M_{control} = 58.31$). An analysis of effect size from partial Eta squared, using G*Power v3.1 (Faul et al., 2007) revealed an effect size f = .30, which corresponds to a moderated effect according to Cohen's guidelines (Rothwell, 2021). A post-hoc analysis of achieved power for the analysis was β = .84.

Planned contrasts (F(2,165) = 3.82, p = .024) revealed that, consistent with H2, a self-enhancement motive significantly increased participants' savings intentions compared to a self-consistency motive (p = .007, 95% CI [4.41, 26.89]). However,

according to the planned contrasts table, savings intentions did not significantly differ among participants in the control condition, compared to the self-enhancement (p = .113, 95% CI [-20.06, 2.15]); or the self-consistency (p = .245, 95% CI [-4.63, 18.02]) conditions. Accordingly, it is unclear whether is a self-enhancement or a selfconsistency motive that drives the effect of self-concept motives on savings intentions.

Table 4.

Study 2a Results

Study 2a Descriptive Statistics Dependent Variable: Savings intentions (\$100.00)

		Std.	
Condition	Mean	Deviation	Ν
Self_enhancement	67.2833	28.85563	60
Self_consistency	52.3889	32.88483	54
Control	58.3103	29.47863	58
Total	59.5814	30.81921	172

Tests of Between-Subjects Effects

Dependent	Variable:	Savings intention	(\$100.00)
1		0	

Source	df	F	Sig.
Corrected Model	6	2.636	.018
Intercept	1	55.459	.000
TW_ST_Index_1	1	8.498	.004
income_4	1	.011	.917
sex	1	.032	.857
savings	1	.059	.809
Condition_1	2	3.823	.024
Error	165		
Total	172		
Corrected Total	171		

a. R Squared = .087 (Adjusted R Squared = .054)

Study 2a Contrast Test Results

Dependent Variable: Savings intentions (\$100.00)

Source	df	F	Sig.
Contrast	2	3.823	.024
Error	165		

3.3.6 Discussion

The results support the prediction that a self-enhancement mindset increases consumers' willingness to save, and a self-consistency mindset decreases consumers' willingness to save, thus giving evidence for H2. These findings are not only novel to the personal financial behavior literature, but are also significanly relevant to social marketers and policy makers. A practical application of these findings is to use selfenhancement directed communications on educational material and advertisement that are targeted at economically vulnerable consumers.

The sample size for this study was adequate to detect a large effect size (.40; N=172). A post-hoc analysis revealed the achieved power for the analysis was β = .84; additionally, the effect size detected (f = .30) corresponds to a moderated effect according to Cohen's guidelines (Rothwell, 2021). Although this study does provide evidence to the hypothesized effect of self-motives on savings intentions predicted on H2, the analysis showed that the level of savings intentions in the control condition did not significantly differ from any self-motive conditions. As such, it remains unclear whether self-enhancement motives drive people to save significantly more than no stated motive or whether self-consistency motives leads to significantly less

savings intentions than no salient motive. This question is addressed in the following study (2B).

3.4 Study 2B

This study aimed to replicate the results of Study 2A while providing insight into the self-motives to savings intentions relationship. Specifically, I sought to investigate whether self-enhancement motives drive consumers to higher willingness to save or self-consistency motives lower consumers' savings intentions. This relationship was unclear in Study 2A since neither of the self-motive conditions significantly differed from the control condition. To address this weakness, I replicated the study with a control condition that is more neutral. Specifically, instead of asking participants in the control condition to describe their last grocery store visit, I instructed participants in the control condition to describe the space around them (behavioral lab at Florida International University). Besides the control manipulation, the stimulus was identical to the one used in Study 2A.

3.4.1 Participants and Design

Based on the generally accepted power of .80 in psychology (Dattalo, 2008), a power analysis conducted using G*Power v3.1 (Faul et al., 2007) to achieve power to detect a large effect of .40 at an alpha level .05 indicates a sample size of 137 is adequate for this analysis. Due to a decreased number of participants taking part in SONA (FIU research system) research sessions at the time this study was conducted, I was able to recruit 110 undergraduates (58% female, M_{age} = 21.69) to complete the survey in exchange for course credit. Upon the beginning of the survey, they were randomly assigned (through Qualtrics randomization protocols) to one of three

conditions (groups) in a single factor (self-motives: self-enhancement n=41 vs. selfconsistency n=31 vs. control n=38) between subject design. Participants were not aware of the different conditions in the study. To the best of my knowledge there were no adverse conditions during the data collection period.

3.4.2 Procedure

This study, including its cover story, manipulations, battery of measures and demographic questions was administered the Florida International University behavioral lab using a Qualtrics web survey. This data was collected on February 26th 2020. First, participants answered the same attention check question employed in the previous studies. Seventeen participants failed the attention screening. The data was analyzed with and without these participants, and there was <u>no change</u> in the significance of the results. We report here the analysis with the whole sample (N = 110). Besides the control manipulation described in the previous section, the stimulus was identical to the one used in Study 2A.

3.4.3 Results

3.4.3.1 Manipulation Check. Two one-sample t-tests were conducted for the self-enhancement group and the self-consistency group. The self-discrepancy manipulation check measure was the dependent variable and the scale neutral point (4) was the test value. The results show that both self-motive conditions resulted in self-discrepancy scores at the neutral level (4) or below it ($M_{self-enhancement} = 3.36$, *t* (1,44) = -2.66, *p*= .011; $M_{self-consistency} = 3.39$, *t* (1,32) = -1.73, *p*= .094); thus, since

both self-concept motive manipulations lead to an average self-discrepancy rating at or below the neutral level (4), the self-motive manipulation was successful.

Further, an independent samples T-test revealed no significant difference in self-discrepancy scores between self-enhancement and self-consistency (t (1,76) = – .093, p >.926). This denotes that both self-motive manipulations induced the same extent of self-discrepancy in both groups, indicating that the self-motive manipulation was successful.

3.4.3.2 Savings intentions. I conducted a ONE-WAY ANCOVA with

tightwad-spendthrift scores, income, gender and reported savings as covariates, savings intentions as the dependent variable and self-concept motive condition as the factor. The results, depicted in table 5, revealed a main effect of the self-motives on savings intentions (F(6,103) = 4.48, p < .05), such that convergent with H2, those in the self-enhancement conditions reported higher savings intentions than those in the self-consistency and control condition ($M_{self-enhancement} = 66.10$, $M_{self-consistency} = 46.84$ $M_{control} = 56.39$). An analysis of effect size from partial Eta squared using G*Power v3.1 [cite Faul at al. 2007] revealed an effect size f = .51, which corresponds to a moderated effect according to Cohen's guidelines (Rothwell, 2021). A post-hoc analysis of achieved power was conducted using G*Power v3.1 (Faul et al., 2007) and revealed the achieved power for the analysis was β = .98.

Planned contrasts (F(2,103) = 4.32, p < .05) revealed that, consistent with H2, a self-enhancement motive significantly increased participants' savings intentions compared to a self-consistency motive (p = .005, 95% CI [5.97, 31.71]). Moreover, according to the planned contrasts table, savings intentions did not significantly differ among participants in the control, compared to the self- consistency (p = .214, 95% CI
[-4.73, 20.85]) condition. However, savings intentions did marginally significantly differ among participants in the control, compared to the self-enhancement (p = .078, 95% *CI* [-20.85, 1.24]) conditions. Hence, it is likely that self-enhancement motives drive people to save significantly more than self-consistency motives.

Table 5.

Study 2b Results

Study 2b Descriptive Statistics

Dependent variable. Savings intentions (ψ 100.00	Dependent	Variable:	Savings intentions	(\$100.00
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Condition	Mean	Deviation	Ν
Self-enhancement	66.0976	27.44978	41
Self-consistency	46.8387	25.15564	31
Baseline	56.3947	30.96951	38
Total	57.3182	28.92697	110

Study 2b Tests of Between-Subjects Effects

Dependent Variable: Savings intentions (\$100.00)

				Observed
Source	df	F	Sig.	Power ^b
Corrected Model	6	4.48	.000	.981
Intercept	1	43.02	.000	1.000
TW_ST_i_2	1	12.87	.001	.945
income_4	1	.55	.460	.114
sex	1	.25	.618	.079
savings	1	2.96	.088	.400
Cond_2	2	4.31	.016	.739
Error	103			
Total	110			
Corrected Total	109			

a. R Squared = .207 (Adjusted R Squared = .161)

b. Computed using alpha = .05

Study 2b Univariate Tests

	df	F	Sig.	Observed Power ^a
Contrast	2	4.32	.016	.739
Error	103			

Dependent Variable: Savings intentions (\$100.00)

The F tests the effect of Condition. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Computed using alpha = .05

3.4.4 Discussion

The results support the prediction that a self-enhancement mindset increases consumers' willingness to save, and a self-consistency mindset decreases consumers' willingness to save, thus providing support for H2. Furthermore, self-enhancement motives did marginally significantly differ from the control group (p = .078). Accordingly, it is likely that self-enhancement motives drive people to save significantly more than self-consistency motives (self-enhancement vs. control p = .078; self-consistency vs. control p = .214). As noted in the previous study's discussion section, these findings are highly meaninful to the marketing literature. By detecting that certain self-motives significantly influence consumers' savings intentions, the present study provides novel findings to the financial decision making literature.

Although the sample size for this study was slightly below the number required (137) to detect a large effect size (.40; actual sample n=110), a post-hoc analysis revealed an achieved power of β = .98. An analysis of effect size from partial eta-sqares, showed a medium effect (f =.51) was detected. In the next study, I seek to establish the underlying mechanism for the effect detected in Studies 2a and 2b,

specifically the view that the self-motive to financial behavior relationship is mediated by construal level mindset activation.

3.5 Study 3

This study aims to test the hypothesized mediation role of construal level mindset activation within the self-concept motives to financial behavior relationship (H3). Study 3 is an experiment in which I manipulated participants' self-motive, either self-consistency or self-enhancement, and examined its indirect effect on willingness to save through construal level mindset activation.

3.5.1 Participants and Design

The sample for this study consisted of FIU marketing students, who were recruited via SONA (internal FIU research system) and voluntarily completed the experiment in exchange for course credit. Based on the generally accepted power of .80 in psychology (Dattalo, 2008) a power analysis conducted using G*Power v3.1 (Faul et al., 2007) to achieve power to detect a medium effect of $f^2 = .15$ at an alpha level .05 indicates a sample size of 119 is adequate for this analysis. In order to account for unnesable data, 147 undergraduates (57% female, M_{age}= 24) were recruited via SONA (internal FIU research system) and randomly assigned (at the beggining of the survey, through Qualtrics randomization protocols) to one of two conditions (groups) in a single factor (self-motives: self-enhancement n=65 vs. selfconsistency n=73) between subject design.

3.5.2 Procedure

This study including its cover story, manipulations, battery of measures and demographic questions was administered using a Qualtrics web survey. The survey was open for four days (from October 02nd to October 06th, 2020), during which participants could complete the study from a web-enabled computer or smart device. First, participants responded to the same attention check question used in the previous studies. Five participants failed the attention check and were not allowed to participate in the study (they did not answer the survey), resulting in a final sample of N=138.

The stimuli used to manipulate self-concept motive mindsets were identical to Study 2B. Immediately after the self-motive manipulation check (self-discrepancy), the main dependent variable (savings intentions - adapted from Garbinsky et al., 2014) was collected, followed by the mental level of construal activation measure (modified version of the BIF - Sinha & Lu, 2019. $\alpha = .79$, *Mean* = 4.98, *SD* = 1.22).

Then, in an ostensibly different task, participants' individual differences in savings and spending patterns (tightwad-spendthrift scale -Rick et al., 2008. α = .80, Mean = 3.10, SD = .38) were measured. This variable was used as a statistical control, since individual differences in savings and spending patterns is known to influence savings intentions (Rick et al., 2008; Thomas et al., 2011). Finally, participants answered demographic and demand artifact questions ("*please state what you think was the purpose of this study*").

3.5.3 Results

3.5.3.1 Manipulation Check. Two one-sample t-tests were conducted for the self-enhancement group and the self-consistency group. The self-discrepancy manipulation check measure was the dependent variable and the scale neutral point (4) was the test value¹¹. The results show that both self-motive conditions resulted in self-discrepancy scores at the neutral level (4) or below it ($M_{self-enhancement} = 2.38, t$ (1,64) = -7.34, *p*= .001; $M_{self-consistency} = 3.03, t$ (1,73) = -4.26, *p*= .001); thus, since both self-concept motive manipulations lead to an average self-discrepancy rating at or below the neutral level (4), indicating that the manipulation caused participants to experience self-threat related to a particular facet of their self-concept (i.e., actual-self vs. ideal-self), the self-motive manipulation worked as intended.

Further, an independent samples T-test revealed no significant difference in self-discrepancy scores between self-enhancement and self-consistency (t (1,137) = – 2.03, $p > .064^{12}$). This denotes that both self-motive manipulations induced the same extent of self-discrepancy in both groups, indicating that the self-motive manipulation was successful.

3.5.3.2 Mediation. I conducted ordinary least squares regression using SPSS, with self-motive as the independent variable, mental level of construal activation as

¹¹ The point 4 on the scale reads "neither far, nor close".

¹² A non-significant p value denotes that the self-discrepancy rates for each group did not significantly differ from the neutral level of self-discrepancy (test value, 4).

the mediator and intentions to save as the dependent variable. To rule out the effects of chronicle differences in spending and savings tendencies as a potential alternative explanation, participants' tightwad-spendthrift scores were included in the model as a covariate. Specifically, a bootstrapped mediation model with 5,000 samples using PROCESS Macro - Model 4 (Hayes, 2018) was employed to investigate if the influence of self-motives on savings intentions is mediated by construal level mindset activation while controlling for individual differences in savings and spending tendencies.

The results presented in table 6 depicted a regression model with mental level of construal as the dependent variable that was statistically significant ($R^2 = .19$; F (2,135) = 15.82, p < .00). Self-motives impacted participants' mental level of construal, such that those in the self-consistency condition presented significantly lower construal level, compared to those in the self-enhancement condition (self-motive b = -.85, t = -4.45, p < .00 95% CI [-1.2239; -.4644]).

The mediation results showed that the regression model depicting the effects of self-motives on willingness to save as mediated by mental level of construal was significant ($R^2 = .45$; F(3,134) = 11.05, p < .00). The effect of tightwad-spendthrift scores were statistically significant and accounted for in the model. The results showed mental level of construal (b = 4.66, t = 2.28, p < .02) as a significant predictor of willingness to save. The direct effect of self-motives on willingness to save, when controlling for mental level of construal mindset activation, was non-significant (b = -5.77, t = -1.18, p > .24, 95% CI [-15.44; 3.90). This suggests that mental level of construal activation fully mediates the effect of self-motives on willingness to save. Furthermore, the indirect effect of self-motives on willingness to save.

.50]). The manipulation of self-motives no longer predicts savings intentions once controlled for construal level activation and self-control (95% CI includes zero). These results are depicted in Figure B and provide support for the mediation hypothesis (H3). A post-hoc analysis of achieved power using G*Power v3.1 (Faul et al., 2007) revealed the achieved power for the analysis was β = .98. Further, an effect size analysis from partial r² results using G*Power v3.1 [cite Faul at al. 2007] depicts an effect size f² = .25.

Table 6.

Study 3 Results

Study 3 Ordinary Least Squares Regression-based Mediation (FIU sample n=138) **Outcome variable: Construal level mindset activation (BIF_Index)** Model Summary df1 R R-sq SE Fdf2p .44 .20 1.23 15.82 2 135 .001 **Predictor variable** b SE t Lower Upper р Constant 7.11 .40 17.70 .001 6.32 7.90 .19 Self-motive -.85 -4.45 .001 -1.23 -.47 TW_ST (cov) -.27 .10 -2.67 .008 -.47 -.07 **Outcome variable: Savings intentions (WTS) Model Summary** R Fdf1 R-sq MSE df2 р 3 .45 .20 697.63 11.05 134 .001 **Predictor variable** b SEt Lower р Upper Constant 86.61 17.42 4.97 .001 52.15 121.06 4.89 -1.18 .240 -15.44 3.90 Self-motive -5.77 BIF_Index 2.05 2.28 .024 8.71 4.66 .6120 TW_ST (cov) -9.30 2.45 -3.80 .001 -14.14 -4.46 Total effect of the predictor variable (self-motive) on the outcome variable

(WTS)

	b	SE	t	р	Lower	Upper
	-9.74	4.64	-2.20	.0374	-18.9126	5767
Direct effect of the pre	dictor	variable	(self-mo	tives) on	the outcome w	ariable
(WTS)						
	b	SE	t	р	Lower	Upper
	-5.77	4.89	-1.18	.2402	-15.4553	3.9016
	1. 4	• • •	(10	4.	41 4	• 11

Indirect effect of the predictor variable (self-motive) on the outcome variable (WTS)

	b	BootSE	BootLower	BootUpper
BIF_Index	-3.98	2.09	-8.7098	5003

Figure B.

Study 3 Mediation Figure



3.5.4 Discussion

The results support the prediction that certain self-motives (self-enhancement vs. self-consistency) impact consumers' willingness to save, through their effect on construal level activation, leading to significant differences in savings intentions. As predicted in H3, the results showed that a self-enhancement (self-consistency) mindset will lead to higher (lower) levels of construal, which will in turn result in higher (lower) savings intentions.

While studies 2a and 2b provided evidence to the direct effect of certain selfmotives (i.e., self-enhancement and self-consistency) on consumers' willingness to save, the present study uncovers the underlying mechanism by which the aforementioned effect occurs. By detecting how certain self-motives significantly influence consumers' savings intentions, the present study provides novel and highly relevant findings to the literature on financial decision making.

3.6 Study 4 (approximate replication of study 3, with a different financial behavior -willingness to go into debt)

This study aimed to demonstrate the proposed effects of H4 and H5, namely, the differential impact of self-consistency versus self-enhancement mindsets on debt behavior,¹³ along with the mediating role of construal level mindset activation. Study four was an experiment where I manipulated participants' self-motives, either self-

¹³ Willingness to go into debt was chosen as the dependent variable given its importance to consumer financial well-being (Federal Reserve, 2020). Recent data indicate that eight out of 10 Americans have at least one credit card and over 50% of American households carry a credit card balance, totaling over \$84 billion in outstanding credit card debt (Federal Reserve, 2020).

consistency or self-enhancement and examined their effect on willingness to go into debt and construal level mindset activation.

3.6.1 Participants and Design

The sample for this study consisted of adults who voluntarily completed the experiment in exchange for a small monetary paymentamount. Based on the generally accepted power of .80 in psychology (Dattalo, 2008), an a priori power analysis conducted using G*Power v3.1 (Faul et al., 2007) to achieve power to detect a moderate effect of .26 at an alpha level .05 indicates a sample size of 258 is adequate for this analysis. In order to account for unusable data, 266 adults (49% male, M_{age} = 47.20) were recruited via a Qualtrics paid pannel and randomly assigned (at the beginning of the survey, through Qualtrics randomization protocols) to one of three conditions (groups) in a single factor (self-motives: self-enhancement n=84 vs. self-consistency n=77 vs. control n=105) between subject design.

3.6.2 Procedure

This study, including its cover story, manipulations, battery of measures and demographic questions, was administered using a Qualtrics web survey. The survey was open for three days (from March 22nd to March 24th, 2021), during which participants could complete the study from a web-enabled computer or smart device. The study started with an attention check similar to the one used in study three. Participants who failed the attention screening were not allowed to complete the survey. To the best of my knowledge there were no adverse conditions during the data collection period.

The stimuli used to manipulate self-concept motive mindsets were identical to study three. Immediately after the self-motive manipulation, the dependent variable, participants' willingness to go into debt (adapted from Wilcox et al., 2011), was measured. The measure of willingness to go into debt is explained in detail in the following section. Subsequently, participants responded to manipulation checks as well as a modified version of the BIF (Sinha & Lu, 2019. $\alpha = .76$, *Mean* = 4.31, *SD* = 1.13) and the tightwad–spendthrift scale (Rick et al., 2008. $\alpha = .71$, *Mean* = 3.07, *SD* = 0.77), which measures individual differences in savings and spending patterns. This variable was used as a statistical control because individual differences in savings and spending set al., 2011). After completing the tightwad–spendthrift scale, the participants provided their demographic information (gender, age, income, ethnicity). Finally, they were thanked and debriefed¹⁴.

3.6.3 Measures

Immediately after the self-motive manipulation, willingness to go into debt was measured as the main dependent variable. The cover history specified that the goal of the study was to understand how consumers value the Apple AirPods Pro (retail value \$249.00), and it contained pictures and product information. Participants were asked to indicate how much they would be willing to pay for the Apple AirPods Pro and they were also told that those with five (5) higher monetary evaluations

¹⁴ **Debrief statement:** "This study aimed to understand consumers' willingness to acquire debt. Participants were told that they might be able to purchase a product (AirPods Pro); however, this was done in order to increase the study's realism. No sales transaction related to this study will take place at any time. We urge you not to discuss the details of this study with anyone. Thank you so much for participating in this research study".

would be allowed to purchase the AirPods Pro, at the value of their evaluations (regardless of its monetary value). This information was placed to encourage participants to provide their best monetary evaluation. Subsequently, they were asked how much they would be willing to pay (monetary value) for this product. Specifically, they read the following:

"How much would you be willing to pay for the Apple AirPods Pro with wireless Charging Case (\$249.00 retail value)?

In other words, what is the monetary value you place on the **AirPods Pro?**" (adapted from Wilcox et al., 2011)

Participants then indicated what percentage of this purchase they intended to pay off at the end of their credit card billing cycle, as well as how much credit card debt they currently carried.

3.6.4 Results

3.6.4.1 Pre-test. Sixty-two FIU undergraduate Marketing students (43% male; $M_{Age} = 23$) were recruited via SONA (internal FIU research system) and voluntarily participated in the study (on December 04th 2020) in exchange for course credit. The sample size was determined based on an a priori power analysis conducted with the software G*Power v3.1 (Faul et al., 2007), which determined that to achieve power to detect a moderate effect of .22 at an alpha level .05 a sample size of 67 is adequate for this study. Participants saw the measure of willingness to go into debt (cover history and measure explained above in detail) and indicated how much they were willing to pay for the AirPods Pro.

To determine if the monetary value participants placed on the product (with a chance of actually acquiring the product) was indicative of how much they were willing to go into debt, they were asked on two 7-point scales 1= Very strongly - 7= Very weakly, 7 = Completely - 1= Not at all) to what extent they would be acquiring debt. They also specified how much they would be willing to pay for the product. Specifically, they answered the following:

"When deciding how much would you be willing to pay for the AirPods Pro, I thought about how this purchase would affect my credit card debt." And "when deciding how much I would be willing to pay for the AirPods Pro, I considered that this purchase might increase my credit card debt." These items were averaged to form a debt consideration index (DCI $\alpha = .946$).

The variables WTGID and reported levels of credit card debt were found to be moderately positively correlated, r (62) = .27, p < .02. A regression with willingness to go into debt (WTGID) as a predictor and debt consideration index as the outcome variable shows that WTGID is a significant predictor of debt consideration (F (1,60) = 4.11, p <.05). When considering only those participants who were planning on not paying the whole purchase at the end of their credit card billing cycle (going further into debt in order to acquire the AirPods Pro), their WTGID was a marginally significant predictor of debt consideration (F (1,20) = 3.40, p =.08). These results provide evidence that the proposed measure prompts participants to consider the impact of a purchase on their debt. Thus, the results accurately capture their willingness to go into debt.

3.6.4.2 Manipulation Check. Two one-sample t-tests were conducted for the self-enhancement group and the self-consistency group. The self-discrepancy

manipulation check measure was the dependent variable and the scale neutral point (4) was the test value¹⁵. The results show that both self-motive conditions resulted in self-discrepancy scores at the neutral level (4) or below it ($M_{self-enhancement} = 3.15$, *t* (1,83) = -4.71, *p*= .001; $M_{self-consistency} = 3.40$, *t* (1,76) = -3.5, *p*= .001); thus, since both self-concept motive manipulations lead to an average self-discrepancy rating at or below the neutral level (4), indicating that the manipulation caused participants to experience self-threat related to a particular facet of their self-concept (i.e., actual-self vs. ideal-self), the self-motive manipulation worked as intended.

Further, an independent samples T-test revealed no significant difference in self-discrepancy scores between self-enhancement and self-consistency (t (1,159) = – 1.0, $p > .167^{16}$). This denotes that both self-motive manipulations induced the same extent of self-discrepancy in both groups, indicating that the self-motive manipulation was successful.

3.6.4.3 Willingness to go into debt. I conducted a one-way ANCOVA with tightwad-spendthrift scores as a covariate, willingness to go into debt¹⁷ as the dependent variable, and self-concept motive condition (self-consistency vs. self-enhancement vs. control) as the between-subjects factor. The results, presented in table 7, revealed a statistically significant effect of self-motives on debt behavior intentions (F(3,262) = 7.63, p < .05), such that those in the self-enhancement condition reported lower willingness to go into debt ($M_{_self-enhancement} = 88.86$) than

¹⁵ The point 4 on the scale reads "neither far, nor close".

¹⁶ A non-significant p value denotes that the self-discrepancy rates for each group did not significantly differ from the neutral level of self-discrepancy (test value, 4).

¹⁷ The variables WTGID and reported levels of credit card debt were found to be moderately positively correlated, r(266) = .13, p < .02.

those in the self-consistency ($M_{_self\text{-}consistency} = 138.26$) and control condition ($M_{_control} = 110.23$), which is in line with H4. An analysis of effect size from partial Eta squared, using G*Power v3.1 (Faul et al., 2007), revealed an effect size f = 29, which corresponds to a moderated effect according to Cohen's guidelines (Rothwell, 2021). A post-hoc analysis of achieved power was conducted using G*Power v3.1 (Faul et al., 2007) that revealed the achieved power for the analysis was β = .99.

Planned contrasts (F(2,262) = 6.26, p < .05) revealed that a self-enhancement motive significantly decreased participants' willingness to go into debt, compared to a self-consistency motive (p < .05, 95% CI [-72.49, -20.60]), in line with H4. Further, according to the planned contrasts table, there is a marginally significant difference in willingness to go into debt among participants in the control condition, compared to the self-consistency (p = .074, 95% CI [-47.503, 2.232]) and the self-enhancement (p= .051, 95% CI [-.157, 47.976]) conditions.

Table 7.

Study 4 Results

Study 4 Descriptive Statistics

Depen	dent V	ariable:	WTP	for the	AirPods	Pro	(\$249	retail	value)	?
-------	--------	----------	-----	---------	---------	-----	--------	--------	--------	---

		Std.		
Condition	Mean	Deviation	Ν	
Self-enhancement	88.8571	80.02125	84	-
Self-consistency	138.2597	83.14072	77	
Control	110.2286	88.84659	105	
Total	111.5940	86.35473	266	

Study 4 Tests of Between-Subjects Effects

Dependent Variable: WTP for the AirPods Pro (\$249 retail value)?

				Partial Eta
Source	df	F	Sig.	Squared

Corrected Model	3	7.628	.000	.080
Intercept	1	5.658	.018	.021
TW_ST_Index	1	8.703	.003	.032
Cond	2	6.258	.002	.046
Error	262			
Total	266			
Corrected Total	265			

a. R Squared = .080 (Adjusted R Squared = .070)

Study 4 Contrast Test Results

WTP for the AirPods	Pro	(\$249	retail	value
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Source	df	F	Sig.	Partial Eta Squared
Contrast	2	6.258	.002	.046
Error	262			

3.6.4.4 Mediation. I conducted an ordinary least squares regression using SPSS, with self-motive as the independent variable, mental level of construal activation (BIF Index) as the mediator, and willingness to go into debt as the dependent variable. As in the previous studies, the 10 BIF items were combined to form a unified BIF index ($\alpha = .76$, *Mean* = 4.31, *SD* = 1.13).

To rule out the effects of chronic differences in spending and saving as a potential alternative explanation, participants' tightwad-spendthrift scores were included in the model as a covariate. Specifically, a bootstrapped mediation model with 5,000 samples using PROCESS Macro - Model 4 (Hayes, 2018) was employed to investigate if the influence of self-motives on savings intentions is mediated by construal level activation, while controlling for individual differences in savings and spending tendencies. For this analysis, participants in the control condition were not included, since the objective was to examine the mediation role of construal level

mindset activation within the self-motives to financial behavior relationship. Thus, the sample size for this analysis is N=161.

The regression model with mental level of construal as the dependent variable was statistically significant ($R^2 = .12$; F(2,158) = 10.86, p < .05). Self-motives impacted participants' mental levels of construal, such that those in the self-consistency condition presented a significantly lower construal level, compared to those in the self-enhancement condition (self-motive b = -.43, t = -2.48, p < .05 95% CI [-.7739; -.0878]).

The mediation results depicted in table 8 showed that the regression model depicting the effects of self-motives on willingness to go into debt as mediated by mental level of construal, was significant ($R^2 = .21$; F(3,157) = 13.98, p < .05). The effect of tightwad-spendthrift scores was statistically significant (b = 16.64, t = 2.02, p < .05) and accounted for in the model. The results showed the mental level of construal (b = -21.14, t = -3.82, p < .05) as a significant predictor of willingness to go into debt. The indirect effect of self-motives on willingness to go into debt through mental level of construal activation is statistically significant (b = 9.11, 95% CI [1.5535; 20.1207]). A post-hoc analysis of achieved power was conducted using G*Power v3.1 (Faul et al., 2007) and revealed the achieved power for the analysis was β = .99. Further, an effect size analysis from partial r² results using G*Power v3.1(Faul et al., 2007) depicts a small effect size f² = .14. Taken together, these results provide support for the mediation hypothesis (H5).

Table 8.

Study 4 Mediation Results

Study 4 Ordinary Least Squares Regression-based Mediation (Qualtrics sample n=161)

Outcome variable: Construal level mindset activation (BIF_Index)									
Model Summary									
R	R-sq	SE	F	df1	df2	р			
.35	.12	1.20	10.86	2	158	.001			
Predictor variable	b	SE	t	р	Lower	Upper			
Constant	6.15	.43	14.34	.001	5.30	6.70			
Self-motive	43	.17	-2.48	.014	77	09			
TW_ST (cov)	42	.11	-3.69	.001	64	20			

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Outcome variable: Willingness to go into debt (WTGID)

Model Summary									
R	R-sq	MSE	F	df1	df2	р			
.46	.21	5805.29	13.98	3	157	.001			
Predictor variable	b	SE	t	р	Lower	Upper			
Constant	94.60	45.22	2.09	.038	5.28	183.93			
Self-motive	36.37	12.31	2.98	.003	12.33	60.95			
BIF_Index	-21.14	5.53	-3.82	.001	-32.06	-10.21			
TW_ST (cov)	16.64	8.23	2.02	.045	.38	32.89			

Total effect of the predictor variable (self-motive) on the outcome variable (WTGID)

b	SE	t	р	Lower	Upper
45.74	12.58	3.64	.001	20.8914	70.5982

Direct effect of the predictor variable (self-motives) on the outcome variable (WTGID)

b	SE	t	р	Lower	Upper
36.64	12.31	2.98	.003	12.3286	60.9462

Indirect effect of the predictor variable (self-motive) on the outcome variable (WTGID)

	b	BootSE	BootLower	BootUpper
BIF_Index	9.11	4.79	-1.5535	20.1207

Figure C.

Study 4 Mediation Figure



3.6.5 Discussion

The results support the prediction that a self-enhancement mindset decreases consumers' willingness to go into debt, and a self-consistency mindset increases consumers' willingness to go into debt, thus giving evidence for H4. Furthermore, the results support the prediction that certain self-motives (self-enhancement vs. selfconsistency) impact consumers' debt behavior through their effect on construal level activation, leading to significant differences in debt acquiring intentions. As predicted in H5, the results showed that a self-enhancement (self-consistency) mindset will lead to higher (lower) levels of mental construal, which will, in turn, result in lower (debt) debt acquiring behavior intentions. The sample size for this study was adequate to detect a moderate effect of .2 at an alpha level .05 (n=266). A post-hoc analysis revealed the achieved power for the analysis was β = .95, and an effect size analysis from partial r² results depicts a small effect (f² = .11).

As previously mentioned, by shedding light on how certain self-motives influence consumers' debt behavior intentions, the present study provides novel contribution to the personal financial behavior literature that is significantly relevant to social marketers and policy makers. A practical application of these findings is to use self-enhancement directed communications on educational and advertisement that is targeted at economically vulnerable consumers. The following four studies center on the suggested moderating variable: connectiveness to future-self. Specifically, the following studies investigate if a stronger (versus weaker) connection to one's futureself bears any impact on the self-motives to financial behavior relationship.

3.7 Study 5

This study aims to establish the moderation role of the relationship between the connection to future self and willingness to go into debt (H7a and H7b). Study five is an experiment where I manipulated participants' self-motives (selfenhancement vs. self-consistency) and examined their indirect effect on willingness to go into debt (WTGID) through construal level mindset activation. Additionally, I manipulated participants' connectedness to their future selves to investigate its moderating role in the relationship between self-motives and debt behavior.

3.7.1 Participants and Design

The sample for this study consisted of adults who voluntarily completed the experiment in exchange for a small monetary amount. Based on the generally accepted power of .80 in psychology (Dattalo, 2008), an a priori power analysis conducted using G*Power v3.1 (Faul et al., 2007) to achieve power to detect a moderate effect of .25 at an alpha level .05 indicates a sample size of 210 is adequate for this analysis. In order to account for unusable data, 253 adults (49% male, M_{age} = 36.88) were recruited via a Qualtrics paid pannel and randomly assigned (at the beginning of the survey, through Qualtrics randomization protocols) to one of four conditions (groups) in a 2 (self-motives: self-enhancement, self-consostency) X 2 (CTFS: weak, strong) between subject design: self-enhancement X strong CTFS n=65 vs. self-enhancement X weak CTFS n=65 self-consistency X strong CTFS n=59 and self-consistency X weak CTFS n=64.

3.7.2 Procedure

This study, including its cover story, manipulations, battery of measures and demographic questions, was administered using a Qualtrics web survey. The survey was open for six days (from May 04th to May 10th, 2021), during which participants could complete the study from a web-enabled computer or smart device. First, participants answered an attention check similar to the one used in study four. Participants who failed the attention screening were not allowed to complete the survey. To the best of my knowledge there were no adverse conditions during the data collection period. The stimuli used to manipulate self-concept motive mindsets were identical to study four. Immediately after the self-motive manipulation, the dependent variable, participants' willingness to go into debt (adapted from Wilcox et al., 2011), was measured. This measure of willingness to go into debt was the same used on study four. Subsequently, participants responded to manipulation checks as well as a modified version of the BIF (Sinha & Lu, 2019. $\alpha = .71$, *Mean* = 4.73, *SD* = 1.28) and the tightwad–spendthrift scale (Rick et al., 2008. $\alpha = .74$, *Mean* = 2.77, *SD* = 0.64), which measures individual differences in savings and spending patterns. This variable was used as a statistical control, because individual differences in savings and spending patterns are known to influence savings intentions (Rick et al., 2008; Thomas et al., 2011). After completing the tightwad–spendthrift scale, the participants completed the manipulation checks for connectedness to future-self (explained in detail in the next section). Lastly, participants answered questions pertaining to their mood and demographics, and were thanked and debriefed.

3.7.3 Measures

This study implemented the connection to future-self manipulation (adapted from Bartels & Urminsky, 2011). Participants saw an animated video in which a young adult describes the stability (high future-self connection) or instability (low future-self connection) of identity in young adulthood. Specifically, the video showed the young adult saying the following:

"Are you in the present different from you in the future? According to a recent study published by an Ivy-League University, if you are under 35 years old (over 21 years old) the answer is yes (no). They studied over two thousand people and found out that the most important personality forming milestones happen during early and middle adulthood (childhood and adolescence) and are solidified at mid-thirties (late teenage years). Seventy-three percent of the

respondents said that the relationships that shaped who they are happened later (early) in life, after (before) their 30th (20th) birthday. Six out of every ten participants agreed that they have changed a lot since their late twenties (not changed much since their early twenties). The study concluded that the major events that shape who you are happen later (early) in life, and are solidified by your early forties (late teenage years); in general, people change very much (very little) after their 30th (21st) birthday. " (adapted from Bartels & Urminsky, 2011, p. 187).

Subsequently, they were asked questions pertaining to the video and its information:

"Please rate how much you liked the video" (response scale: 0=very little, 100=very much) and *"Please rate how useful you found the video"* (response scale 0=not very useful, 100= very useful). Immediately after, participants were informed that the first survey was completed, and that they would start an unrelated second study. Participants were then asked to list five to ten traits that describe the person they are

today. Specifically, they read the following:

"Please think about the important characteristics that make you the person that you are today. Now please use the spaces below to describe these characteristics:

- Your personality
- Your temperament
- Your major likes and dislikes
- Your beliefs
- Your values
- Your ambitions
- Your life goals
- Your ideals

Please be as descriptive as possible and list as many traits as you can think of to describe **your view of yourself as a person today**.

List 5-10 traits of yourself in the spaces provided below: "

Immediately after, participants answered the dependent variable, which was comprised of two questions aimed at establishing participants' connectedness to their future-self.

"Still thinking about the important characteristics that make you the person you are now, such as (autofill with the first five characteristics the participant answered on the previous question), please rate the degree of connectedness between the person you expect to be in eight years compared to the person you are now: " (response scale anchored at 0 = "I will be completely different in the future", 10 = "I will be exactly the same in the future").

"Please think again about these important characteristics that make you who you are today: (autofill with the first five characteristics the participant answered on the previous question). Indicate your opinion about the degree of connectedness held between the person you are now and the person you will be in a few years.

Use the scale below to rate the degree of connectedness between the person you expect to be in eight years compared to the person you are now: "

Zero means "completely disconnected" and 100 means "completely connected"



Both these measures were averaged and formed a connectedness to future-self index

(CTFS_Index r = .56 p < .05).

To test whether participants perceptions of their actual or ideal selves were highly similar with their perceptions regarding their future-self I included a measure of overlap among these dimensions. Specifically, I asked participants the following:

"To what extent will your future-self, who you will be in eight years, possess the traits you listed for your ideal (actual) – self, such as (autofill with the first five characteristics the participant answered on the self-motives manipulation). Indicate your opinion about the degree of connectedness held between the person you are now and the person you will be in eight years". Two response scale achored at 0 = "not at all", 5 = "very much" and 0 ="describes my future-self very poorly', 5 = "describes my future-self very well."

Both these measures were averaged and formed a comparison among activated self

and future-self index (CASXFS_Index r = .91 p < .05). An independent samples Ttest revealed no significant difference in overlap scores between self-enhancement and self-consistency ($t(1,254) = .213, p > .831^{18}$). This denotes that both self-motive manipulations induced the same extent of future-self overlap in both groups, indicating that the self-motive manipulation did not interefere with the connectedness to future-self manipulation.

3.7.4 Results

3.7.4.1 Pre-test. One hundred and two FIU undergraduate Marketing students (37% male; $M_{Age} = 22$) were recruited via SONA (internal FIU research system) and voluntarily participated in the study in exchange for a course credit. The study was a

¹⁸ A non-significant p value denotes that the overlap among the activated self (actual vs. ideal) and the future-self rates for each group did not significantly differ.

web-based survey that was available over the course of three days (March 08^{th} through March 10^{th} , 2021), in which participants could access the survey through their computer or smart device (phone/tablet). The sample size was determined based on an a priori power analysis conducted with the software G*Power v3.1 (Faul et al., 2007), which determined that to achieve power to detect a moderate effect of .22 at an alpha level .05, a sample size of 67 was adequate for this study. Participants saw the measure of connectedness to future-self (cover history and measure explained above in detail). Subsequently, they indicated the degree to which their future-self was going to overlap with themselves in the present in terms of the major characteristics that described them as a person today. This measure was collected using two different scales (measure is explained in detail above on the "measure" section). Both these scales were averaged to form a connectedness to future-self index (CTFS_Index r = .56 p < .05).

I conducted a one-way ANOVA with condition (strong vs. weak connection to future-self) as the independent variable and CTFS_index as the dependent variable. Participants in the strong connection to future-self condition reported higher levels of connectedness to their future-self ($M_{_{strong}_{_{c}CTFS}} = 69.40$) compared to their counterparts in the weak connection to future-self condition ($M_{_{Weak}_{_{c}CTFS}} = 60.39$), and this difference was significant. (F(1,100) = 5.14, p < .05). These results provide evidence that the proposed measure accurately manipulates participants' level of connectedness to their future-self.

3.7.4.2 Manipulation Check. Self-motives: As in study four, I conducted two one-sample t-tests for the self-enhancement group and the self-consistency group. The self-discrepancy manipulation check measure was the dependent variable and the

scale neutral point (4) was the test value¹⁹. The results show that both self-motive conditions resulted in self-discrepancy scores at the neutral level (4) or below it $(M_{self-enhancement} = 3.41, t (1,135) = -3.65, p = .001; M_{self-consistency} = 3.14, t (1,123) = -6.07, p = .001);$ thus, since both self-concept motive manipulations lead to an average self-discrepancy rating at or below the neutral level (4), indicating that the manipulation caused participants to experience self-threat related to a particular facet of their self-concept (i.e., actual-self vs. ideal-self), the self-motive manipulation worked as intended.

Further, an independent samples T-test revealed no significant difference in self-discrepancy scores between self-enhancement and self-consistency (t (1,258) = – 1.27, $p > .206^{20}$). This denotes that both self-motive manipulations induced the same extent of self-discrepancy in both groups, indicating that the self-motive manipulation was successful.

Connectedness to future-self. The two measures for participants'

connectedness to

their future-selves were averaged to form a connectedness to future-self index (CTFS_Index $r = .51 \ p < .05$). I conducted a one-way ANOVA with condition (strong vs. weak connection to future-self) as the independent variable and CTFS_ index as the dependent variable. Participants in the strong connection to future-self condition reported higher levels of connectedness to their future-self ($M_{_{strong}_{_{CTFS}}} = 80.66$) compared to their counterparts in the weak connection to future-self condition ($M_{_{Weak}_{_{CTFS}}} = 75.46$), and this difference was significant. (F(1,251) = 4.97, p < .05).

¹⁹ The point 4 on the scale reads "neither far, nor close".

²⁰ A non-significant p value denotes that the self-discrepancy rates for each group did not significantly differ from the neutral level of self-discrepancy (test value, 4).

These results provide evidence that the proposed measure accurately manipulates participants' level of connectedness to their future-selves.

3.7.4.3 Moderation. As presented in table 9, an analysis of covariance (ANCOVA) with willingness to go into debt²¹ as the dependent variable, self-motives and connectedness to future-self as the factors and TW_ST scores as a covariate elicited a non-significant interaction effect of self-motives and CTFS (F(1,248) = 2.51, p > .11). The main effect of CTFS (F(1,248) = .15, p > .70) and of the covariate (TW_ST scores, F(1,248) = .41, p > .52) were also not significant. The main effect of self-motives was marginally significant (F(1,248) = 3.11, p > .08).

Table 9.

Study 5 Results

Study 5 Descriptive Statistics

Dependent Variable: WTP AirPods Pro (\$249 retail value)

			Std.	
Self_motive	CTFS	Mean	Deviation	Ν
Self-consistency	Weak	64.3594	60.79744	64
	Strong	79.4746	67.39957	59
	Total	71.6098	64.23314	123
Self-enhancement	Weak	61.4615	63.27373	65
	Strong	52.3692	50.06982	65
	Total	56.9154	57.01639	130
Total	Weak	62.8992	61.83191	129
	Strong	65.2661	60.26002	124
	Total	64.0593	60.95692	253

Study 5 Tests of Between-Subjects Effects

²¹ The variables WTGID and reported levels of credit card debt were found to be moderately positively correlated, r (256) = .12, p < .05.

Source	df	F	Sig.	Observed Power ^b
Corrected Model	4	1.691	.153	.515
Intercept	1	9.196	.003	.856
TW_ST_Index	1	.412	.522	.098
Self_motive	1	3.110	.079	.420
CTFS	1	.147	.702	.067
Self_motive *	1	2.511	.114	.352
CTFS				
Error	248			
Total	253			
Corrected Total	252			

Dependent Variable: WTP AirPods Pro (\$249 retail value)

a. R Squared = .027 (Adjusted R Squared = .011)

b. Computed using alpha = .05

3.7.4.3 Moderated mediation. Because the results of a 2 (self-motives: selfenhancement vs. self-consistency) X 2 (CTFS (weak vs. strong) ANCOVA on the predicted underlying measure (construal-level mindset activation) was not significant, I did not conduct a moderated mediation as proposed in the framework.

3.7.5 Discussion

Findings for the analysis revealed a marginal significant effect of self-motives on willingness to go into debt. However, analyses of connectedness to future-self as a moderator for the effects of self-motives on willingness to go into debt revealed nonsignificant results. Accordingly, hypothesis 7b, which predicted that for selfenhancement mindset consumers, the level of psychological connection with the future self will not be associated with willingness to go into debt, is supported. However, hypothesis 7a, which proposes that for self-consistency mindset consumers, greater (lesser) psychological connection with the future self will be associated with lesser (greater) willingness to go into debt, was not supported.

Following objective self-awareness theory (Silvia & Duval, 2001), which essentially predicts that the act of reflecting on a specific facet of the self-concept sparks a comparison between the self and a standard (Pham et al., 2010; Silvia & Phillips, 2004; Yazdanparast & Spears, 2018), the next set of five studies does not rely on an ostensibly self-discrepancy based self-motive's manipulation, as the previous studies had. Instead, the following five studies contain a self-concept motive (i.e., self-enhancement vs. self-consistency) manipulation that merely makes the desired possible-self (i.e., ideal vs. actual) accessible to participants.

The goal with this shift in manipulation was twofold: first, to investigate if the mere accesibility of a particular possible-self (i.e., ideal vs. actual) would indeed lead to a motivational state and replicate the hypothesized effects detected in studies 1 (H1), 2a and 2b (H2) and 3 (H3); second, to add generalizability to the findings and to address the possible weakness of using obvious self-discrepancy as a manipulation of self-motives, giving the fact that it might be challenging to lead consumers to a state of discrepancy from their actual-self.

3.8 Study 6 (replication of study 1 without self-discrepancy manipulation)

This study aimed to test the prediciton that self-motives impact consumers' mental level of construal (H1). In study six, I manipulated the participants' self-motives, i.e., either self-consistency or self-enhancement, and measured their construal level using a modified version of the Behavioral Identification Form – BIF (Sinha & Lu, 2019). Finally, participants answered questions pertaining to demographics.

3.8.1 Participants and Design

The sample for this study consisted of FIU marketing students, who voluntarily completed the experiment in exchange for course credit. Based on the generally accepted power of .80 in psychology (Dattalo, 2008), an a priori power analysis conducted using G*Power v3.1 (Faul et al., 2007) to achieve power to detect a medium effect of .25 at an alpha level .05 indicates a sample size of 159 is adequate for this analysis. In order to account for unnesable data, 211 FIU marketing students (62% female, M_{age} = 23.6) were recruited via SONA (internal FIU research system) and randomly assigned (at the beginning of the survey, through Qualtrics randomization protocols) to one of three conditions (groups) in a single factor (selfmotives: self-enhancement n=77 vs. self-consistency n=59 vs. Control n=75) between subject design. Participants were not aware of the different conditions in the study.

3.8.2 Procedure

This study including its cover story, manipulations, battery of measures and demographic questions was administered using a Qualtrics web survey. The survey was open for four days (from December 04th to December 08th, 2020), during which participants could complete the study from a web-enabled computer or smart device. Upon starting the survey, participants answered an attention check question, which asked them to select the response option "not at all carefully" if they read the question instructions. Thirty-two participants failed the attention screening. To the best of my knowledge there were no adverse conditions during the data collection period. The data were analyzed with and without these participants, and no change was observed

in the significance of the results. I report the analysis with the whole sample (N = 211).

Next, participants read the cover story corresponding to their assigned condition (self-enhancement vs. self-consistency vs. control), followed by the correspondent self-motive condition task or neutral (control condition) task. Subsequently, they read a cover story which informed them that the first study had been completed, and they would participate in an unrelated research study about how people think differently regarding any behavior (construal level measurement). After completing the mental level of construal measure, participants completed a selfconcept motive manipulation check. Finally, after answering demographic questions, they were debriefed and thanked for their participation.

3.8.3 Manipulations

The manipulation instructions for all three conditions assured the participants of their anonymity and asked them to provide truthful and honest answers. In the control condition, the cover story welcomed participants to the "*Perceptions*" study. The instructions asked them to describe their surroundings, namely the physical space in which they were at the moment, by typing it in a short essay form box in Qualtrics.

"Now please take a deep breath and relax. Take a look at everything that surrounds you where you are currently. Tell us about it in the space below."

In the self-motive condition, the cover story welcomed participants to the *"Self-concept"* study. The instructions asked them to think and write about a certain aspect of their self-concept. To prime a specific self-concept motive, the writing task was designed to increase the accessibility of the self-concept facet associated with that particular self-motive. Thus, to prime the self-consistency motive, the manipulation

involved a writing task that increased the cognitive accessibility of participants' actual self (Swann et al., 1992). Similarly, the self enhancement manipulation increased cognitive accessibility of participants' ideal self (Sedikides, 1993).

The self-concept motive manipulation instructions asked participants to think about and list traits of the type of person they are (actual self), or who they desire to be ideally (ideal self):

"Please describe the actual (ideal²²) type of person you are (would like to be). Please be as descriptive as possible and list as many traits as you can think of to describe your actual (ideal) view of yourself as a person. List 5–10 traits of your actual (ideal) self in the spaces provided below."

The survey contained 10 entry forms for participants to complete the sentence *"I ideally would like to be…"* (self-enhancement condition), or *"I am"* (self-consistency condition) with the traits they would like to have (self-enhancement condition), or they believe to possess (self-consistency condition).

3.8.4 Measures

The manipulation-check measure consisted of two questions:

"To what extent does your actual (ideal)-self possess the traits you listed, such as..."

This section of the survey concluded with three of the traits that the participants filled in the previously completed self-concept manipulation. Answer options consisted of two 7-point scales (1=not at all / 7 = very much; 1= not at all / 7 = completely).

²² The information in parenthesis indicates a separate condition.

"How consistent are the traits you listed such as (the survey completed this section with three of the traits each participant filled in the prior self-concept manipulation) with how you view your actual (ideal)-self?" The seven-point response scale was anchored by "not at all" (1) and "very much" (7). I averaged these three items to form a manipulation check index ($\alpha = .86$, Mean = 5.48, SD = 1.39).

Immediately after the self-motive manipulation check (self-discrepancy), the main dependent variable (mental level of construal activation) was collected. As in the previous studies, I used a modified version of the BIF (Sinha & Lu, 2019. 10 items combined to form an unified BIF index $\alpha = .76$, *Mean* = 4.62, *SD* = 1.16).

3.8.5 Results

3.8.5.1 Manipulation Check. Descriptive statistics showed that both selfmotive conditions elicited a distinct possible self within participants' self-concept. Specifically, participants in the self-enhancement condition showed that they considered the traits from the self-concept manipulation as traits in their ideal self $(M_{_self-enhancement} = 5.05, SD = 1.37,$ mean scores above the neutral (4) level). Likewise, participants in the self-consistency condition reported a high overlap among the traits in the self-concept manipulation with their view of their actual selves ($M_{_self-consistency}$ = 5.98, SD = 1.38, mean scores above the neutral (4) level). Accordingly, the selfconcept manipulation successfully induced participants to focus on their ideal (or actual) self. Thus, the self-concept manipulation worked as intended. **3.8.5.2 Mental Construal Level Activation**. I conducted a one-way ANOVA with the averaged BIF_Index as the dependent variable and self-concept motive condition as the factor. Convergent with H1, the results presented on table 10 revealed that the difference in participants' construal level was significant, as shown by the omnibus test (F(2,210) = 16.99, p < .05), such that participants in the self-enhancement ($M_{_self\text{-enhancement}} = 5.13$) and control ($M_{_control} = 4.55$) conditions presented higher construal level, compared to participants in the self-consistency condition ($M_{_self\text{-enhancement}} = 4.05$). A post-hoc analysis of achieved power was conducted using G*Power v3.1 (Faul et al., 2007) and revealed the achieved power for the analysis was β = .99. Further, an analysis of effect size from means, using G*Power v3.1 (Faul et al., 2007), revealed that the effect size detected is robust (effect size f =.43).

The planned comparison test revealed that the control and self-enhancement conditions significantly differ ($t = -3.33 \ p < .05$). Likewise, the control and selfconsistency conditions significantly differ among each other ($t = 2.64 \ p < .05$). More importantly, both self-motive conditions significantly differed from each other ($t = 5.78 \ p < .05$). Thus, I can infer that self- motives significantly impact participants' mental level of construal, compared to the control condition. Additionally, the results have shown that construal level mindset activation significantly differs between the self-motive conditions (self-enhancement vs. self-consistency), which provides support for H1.

Table 10.

Study 6 Results

Study 6 Descriptives						
Construal level mindset						
		Std.	Std.	95% Confidence		
Ν	Mean	Deviation	Error	Interval for Mean	Minimum	Maximum

					Lower Bound	Upper Bound		
Self- enhancement	77	5.13	1.030	.117	4.8935	5.3611	2.40	7.00
Self-consistency	59	4.05	1.361	.177	3.6960	4.4056	1.00	7.00
Control	75	4.56	.844	.097	4.3512	4.7394	2.80	7.00
Total	211	4.62	1.155	.079	4.4627	4.7762	1.00	7.00

Study 6 ANOVA

Construal level mindset

	df	F	Sig.
Between Groups	2	16.991	.000
Within Groups	208		
Total	210		

Study 6 Contrast Tests

			Value of	Std.			Sig.
		Contrast	Contrast	Error	t	df	(2-tailed)
BIF_Ind	Assume equal	1	1.0764	.18617	5.782	208	.000
	variances	2	5819	.17457	-3.334	208	.001
		3	.4945	.18725	2.641	208	.009
	Does not assume	1	1.0764	.21260	5.063	104.676	.000
	equal variances	2	5819	.15255	-3.815	145.731	.000
		3	.4945	.20225	2.445	91.767	.016

3.8.6 Discussion

Taken together, the results support the prediction that a self-enhancement mindset led or leads lead consumers to a higher or more abstract level of mental construal, and a self-consistency mindset leads consumers to a lower level of mental construal, thus validating H1. Objective self-awareness theory posits that simply thinking about one's self should initiate an involuntary evaluation process of the self
against benchmarks. Simply put, directing one's attention to a particular facet of their self-concept sparks motivation (Leary & Tangney, 2012). Although previous research has largely relied on self-discrepancy to manipulate self-motives (Chatterjee et al., 2013; Gebauer et al., 2017; Valenzuela et al., 2018), for this and the subsequent four studies I relied on the aforementioned objective self-awareness theory and manipulated self-motives by simply making a particular possible self (ideal-self for self-enhancement vs. actual-self for self-consistency) accessible to participants. Even though this was a subtle manipulation, compared to the previous (self-discrepancy) one, the effect size detected in this study was robust (f =.43). Further, the sample size for this study was adequated to detect a medium effect of .25 at an alpha level .05 (n=211). Accordingly, a post-hoc analysis revealed the achieved power for the analysis was β = .99. In the next study, I aim to replicate the findings of studies 2a and 2b, that is, to investigate the effect of self-motives on the willingness to save (savings intentions²³) using the same self-motives manipulation employed in the present study.

3.9 Study 7 (replication of studies 2a, 2b and 3 without self-discrepancy manipulation)

This study aimed to test the prediction that distinct self-motivs (i.e., selfenhancement vs. consistency) impact savings behavior in opposite manners (H2). Additionally, this study aimed to establish the mediating role of construal level mindset activation to the self-motives to savings intentions relationship (H3). Study seven was an experiment where I manipulated participants' self-motives, either self-

²³ Savings intentions were chosen as the dependent variable given the fact that, even though saving money is a common goal among Americans (Ülkümen & Cheema, 2011), 90% of Americans feel they are not on track with their retirement savings (Federal Reserve, 2018).

consistency or self-enhancement and examined its effect on savings intentions and on construal level mindset activation.

3.9.1 Participants and Design

The sample for this study consisted of FIU marketing students, who voluntarily completed the experiment in exchange for course credit. Based on the generally accepted power of .80 in psychology (Dattalo, 2008), an a priori power analysis conducted using G*Power v3.1 (Faul et al., 2007) to achieve power to detect a moderate effect of .25 at an alpha level .05 indicates a sample size of 251 is adequate for this analysis. In order to account for unusable data, 267 FIU marketing students (58% female, $M_{age} = 23.44$) were recruited via SONA (internal FIU research system) and randomly assigned (at the begining of the survey, through Qualtrics randomization protocols) to one of three conditions (groups) in a single factor (self-motives: self-enhancement n=92 vs. self-consistency n=99 vs. control n=76) between subject design.

3.9.2 Procedure

This study, including its cover story, manipulations, battery of measures and demographic questions was administered using a Qualtrics web survey. The survey was open for four days (from December 11th to December 15th, 2020), during which participants could complete the study from a web-enabled computer or smart device. First, participants answered an attention check similar to the one used in study six. Fourty-six (46) participants failed the attention screening. The data were analyzed with and without these participants, and no change in the significance of the results was observed. Thus, I present the analysis with the whole sample (N = 267). To the

best of my knowledge there were no adverse conditions during the data collection period.

The stimuli used to manipulate self-concept motive mindsets were identical to study six. Immediately after the self-motive manipulation, the dependent variable, participants' willingness to save (adapted from Garbinsky and colleagues (2014), was measured. This measure of willingness to save was identical as the one used on the previous studies. Subsequently, participants responded to manipulation checks as well as a modified version of the BIF (Sinha & Lu, 2019. $\alpha = .78$, *Mean* = 4.78, *SD* = 1.16) and the tightwad–spendthrift scale (Rick et al., 2008. $\alpha = .91$, *Mean* = 4.21, *SD* = 1.53), which measures individual differences in savings and spending patterns. This variable was used as a statistical control, since individual differences in savings and spending patterns are known to influence savings intentions (Rick et al., 2008; Thomas et al., 2011). After completing the tightwad–spendthrift scale, the participants provided their demographic information (gender, age, income, ethnicity). Finally, they were thanked and debriefed.

3.9.3 Results

3.9.3.1 Manipulation Check. As in study six, I averaged the three manipulation check items to form a manipulation check index ($\alpha = .76$, *Mean* = 4.95, SD = 1.13). According to descriptive statistics, participants in the self-enhancement condition indicated whether they considered the traits from the previously completed self-concept manipulation as traits they envisioned in their ideal selves ($M_{_self}$ -enhancement = 4.69, SD = 1.09). Likewise, participants in the self-consistency condition reported a high overlap among the traits in the self-concept manipulation with their

view of their actual selves ($M_{_self\text{-}consistency} = 5.20$, SD = 1.13). Both conditions induced participants to focus on a specific facet of their self-concept (ideal vs. actual self. Mean scores above the neutral (4) level). Accordingly, the self-concept manipulation successfully induced participants to focus on their ideal (or actual) self. Thus, the selfconcept manipulation worked as intended.

3.9.3.2 Savings intentions. I conducted a one-way ANCOVA with tightwadspendthrift scores as a covariate, savings intentions as the dependent variable, and self-concept motive condition (self-consistency vs. self-enhancement vs. control) as the between-subjects factor. The results presented in table 11 revealed a statistically significant effect of self-motives on savings intentions (F(3,260) = 8.63, p < .05), such that those in the self-enhancement condition reported higher savings intentions ($M_{_self-enhancement} = 77.87$) than those in the self-consistency ($M_{_self-consistency} = 59.38$) and control condition ($M_{_control} = 64.04$), which is in line with H2. An analysis of effect size from partial Eta squared, using G*Power v3.1 (Faul et al., 2007), revealed an effect size f = .31, which corresponds to a moderated effect according to Cohen's guidelines (Rothwell, 2021). A post-hoc analysis of achieved power was conducted using G*Power v3.1 (Faul et al., 2007) and revealed the achieved power for the analysis was β = .99.

Planned contrasts (F(2,260) = 9.74, p < .05) revealed that a self-enhancement motive significantly increased participants' savings intentions, compared to a selfconsistency motive (p = .007, 95% CI [9.93, 25.97]), in line with H2. Likewise, according to the planned contrasts table, savings intentions differ (marginally significantly) among participants in the control condition, compared to the selfenhancement (p = .073, 95% CI [-18.77, .836]) and the self-consistency (p = .062,

95% CI [-.462, 18.43]) conditions.

Table 11.

Study 7 Results

Study 7 Descriptive Statistics

Std.				
Mean	Deviation	Ν		
77.8681	26.62631	91		
59.3814	30.13596	97		
64.0395	26.71202	76		
67.0947	29.02396	264		
	Mean 77.8681 59.3814 64.0395 67.0947	Std. Mean Deviation 77.8681 26.62631 59.3814 30.13596 64.0395 26.71202 67.0947 29.02396		

Study 7 Tests of Between-Subjects Effects

Dependent Variable: Savings intentions (\$100.00)

Source	df	F	Sig.
Corrected Model	3	8.625	.000
Intercept	1	174.025	.000
TW_ST_Index	1	3.884	.050
Condition	2	9.742	.000
Error	260		
Total	264		
Corrected Total	263		

a. R Squared = .091 (Adjusted R Squared = .080)

Study 7 Contrast Test Results

Dependent Variable: Savings intentions (\$100.00)

Source	df	F	Sig.	
Contrast	2	9.742	.000	
Error	260			

3.9.3.3 Mediation. I conducted an ordinary least squares regression using SPSS, with self-motive as the independent variable, mental level of construal activation (BIF Index) as the mediator, and intentions to save as the dependent variable. As in study 1, 10 BIF items were combined to form a unified BIF index (α = .78, *Mean* = 4.78, *SD* = 1.16). To rule out the effects of chronic differences in spending and saving as a potential alternative explanation, participants' tightwadspendthrift scores were included in the model as a covariate. Specifically, a bootstrapped mediation model with 5,000 samples using PROCESS Macro - Model 4 (Hayes, 2018) was employed to investigate if the influence of self-motives on savings intentions is mediated by construal level activation, while controlling for individual differences in savings and spending tendencies. For this analysis, participants in the control condition were not included, since the objective was to examine the mediation role of construal level mindset activation within the self-motives to financial behavior relationship. Thus, the sample size for this analysis is N=188.

As shown in table 12, the regression model with mental level of construal as the dependent variable was statistically significant ($R^2 = .15$; F(2,185) = 16.66, p < .05). Self-motives impacted participants' mental levels of construal, such that those in the self-consistency condition presented a significantly lower construal level, compared to those in the self-enhancement condition (self-motive b = -.93, t = -5.41, p < .05 95% CI [-.2150; -.5898]).

The mediation results showed that the regression model depicting the effects of self-motives on savings intentions as mediated by mental level of construal was significant ($R^2 = .20$; F(3,184) = 15.57, p < .05). The effect of tightwad-spendthrift scores was statistically significant (b = -3.30, t = -2.37, p < .05) and controlled for in

the analysis. The results showed the mental level of construal (b = 6.88, t = 4.07, p<.05) as a significant predictor of savings intentions. The indirect effect of selfmotives on savings intentions through mental level of construal activation is statistically significant (b = -6.38, 95% CI [-11.0862; -2.7832]). A post-hoc analysis of achieved power was conducted using G*Power v3.1 (Faul et al., 2007) and revealed the achieved power for the analysis was β = .99. Further, an effect size analysis from partial r² results using G*Power v3.1 (Faul et al., 2007) depicts an effect size $f^2 = .14$. Taken together, these results provide support for the mediation hypothesis (H3).

Table 12.

Study 7 Mediation Results

Study 7 Ordinary Lea	st Square	s Regressi	on-based	l Mediati	on (FIU sample	e, n=188)
Outcome vari	able: Cor	nstrual lev	vel mind	set activ	ation (BIF_Ind	lex)
Model Summary						
R	R-sq	SE	F	df1	df2	р
.39	.15	1.37	16.66	2	185	.001
Predictor variable	b	SE	t	р	Lower	Upper
Constant	6.53	.34	19.18	.001	5.86	7.20
Self-motive	93	.17	-5.41	.001	-1.27	59
TW_ST (cov)	10	.06	-1.61	.109	22	02
Ou	itcome va	riable: Sa	vings in	tentions	(WTS)	
Model Summary						
R	R-sq	MSE	F	df1	df2	р
.45	.20	725.11	15.57	3	184	.001
Predictor variable	b	SE	t	р	Lower	Upper
Constant	64.75	13.53	4.78	.001	38.05	91.45
Self-motive	-11.20	4.24	-2.69	.009	-19.56	-2.83
BIF_Index	6.88	1.69	4.07	.001	3.54	10.21
TW_ST (cov)	-3.30	1.39	-2.37	.019	-6.04	56

Total effect of the predictor va	ariable (s	elf-motiv	ve) on tł	ne outcome va	riable
(WTGID)					
b	SE	t	р	Lower	Upper
-17.58	4.10	-4.28	.001	-25.6713	-9.4843
Direct effect of the predictor v	ariable (self-mot	ives) on	the outcome v	ariable
(WTGID)					
b	SE	t	р	Lower	Upper
-11.20	4.24	-2.64	.009	-19.5619	-2.8285
Indirect effect of the predictor	[.] variable	e (self-m	otive) or	n the outcome	variable

(WTGID)

	b .	BootSE	BootLower	BootUpper
BIF_Index	6.38	2.13	-11.0862	-2.7832

Figure D

Study 7 Mediation Figure



3.9.4 Discussion

The results support the prediction that a self-enhancement mindset increases consumers' willingness to save, and a self-consistency mindset decreases consumers' willingness to save, thus giving evidence for H2. Furthermore, the results support the prediction that certain self-motives (self-enhancement vs. self-consistency) impacts consumers' willingness to save through their effect on construal level activation, leading to significant differences in savings intentions. As predicted in H3, the results showed that a self-enhancement (self-consistency) mindset will lead to higher (lower) levels of mental construal, which will, in turn, result in higher (lower) savings intentions.

As in study six, the self-motive manipulation employed in this study was less blatant, compared to the previous (self-discrepancy) one. The sample size for this study was adequated to detect a moderate effect of .2 at an alpha level .05 (n=267). A post-hoc analysis revealed the achieved power for the analysis was β = .99 and an effect size analysis from partial r² results depicts a small effect (f² = .14).

As previously mentioned, by shedding light on how certain self-motives influence consumers' savings intentions, the present study provides not only novel contribution to the personal financial behavior literature, but is also significantly relevant to social marketers and policy makers. A practical application of these findings is to use self-enhancement directed communications on educational material and advertisement that are targeted at economically vulnerable consumers. The following study investigates if this effect generalizes to a different population. While

the current study relied on a college student sample to test the hypothesized effects, study eight is a replication of study seven with a non-student sample.

3.10 Study 8 (replication of study 7, with a non-student sample)

This study aimed to replicate the results of study seven in a different population. While study seven was conducted with a student sample, study eight was conducted using MTurk. This was done to test the generalizability of the results detected in study seven. Study eight is an experiment where I manipulated participants' self-motives (self-enhancement vs. self-consistency vs. control) and measured their willingness to save as well as the construal level mindset activation.

3.10.1 Participants and Design

The sample for this study consisted of MTurk workers who voluntarily completed the experiment in exchange for a small monetary compensation. Based on the generally accepted power of .80 in psychology (Dattalo, 2008), an a priori power analysis conducted using G*Power v3.1 (Faul et al., 2007) to achieve power to detect a moderate effect of .25 at an alpha level .05 indicates a sample size of 251 is adequate for this analysis. In order to account for unusable data, 274 respondents were recruited through Amazon Mechanical Turk. Because this study aimed to replicate the findings of study seven within a non-student population, participants answered a population screening question at the beginning of the survey: "are you a student?" (yes or no); eleven (11) participants answered "yes" to the previous question and were not allowed to participate in the study. The same attention screening used in previous studies was used on this one. From the remaining 263 participants, one participant failed the attention screening and was not allowed to complete the survey. From the

initial pool of 274 respondents, 262 (39% male, $M_{age} = 38.18$) passed both the population and attention screening and were allowed to complete the study. As mentioned above, these participants were recruited via Amazon Mechanical Turk (MTurk) and randomly assigned (at the beginning of the survey, through Qualtrics randomization protocols) to one of three conditions (groups) in a single factor (selfmotives: self-enhancement n=83 vs. self-consistency n=95 vs. control n=84) between subject design.

3.10.2 Procedure

This study, including its cover story, manipulations, battery of measures and demographic questions, was administered using a Qualtrics web survey. The survey was available online on March 17th, 2021, and participants could complete the study from a web-enabled computer or smart device. To the best of my knowledge there were no adverse conditions during the data collection period.

The stimuli used to manipulate self-concept motive mindsets were identical to study seven. Immediately after the self-motive manipulation, the dependent variable, participants' willingness to save (adapted from Durante & Laran, 2016; Garbinsky et al., 2014), was measured. This measure of willingness to save was similar as the one used on the previous studies; the only difference is that, instead of asking participants to imagine they have been awarded \$100 for participating in the study, the savings intentions measure asked them to imagine they have won \$1,000 for participating in the study. Subsequently, participants responded to manipulation checks as well as a modified version of the BIF (Sinha & Lu, 2019. $\alpha = .83$, *Mean* = 4.70, *SD* = 1.30) and the tightwad–spendthrift scale (Rick et al., 2008. $\alpha = .76$, *Mean* = 2.73, *SD* = 0.85), which measures individual differences in savings and spending patterns. This variable

was used as a statistical control, because individual differences in savings and spending patterns are known to influence savings intentions (Rick et al., 2008; Thomas et al., 2011). After completing the tightwad–spendthrift scale, the participants provided their demographic information (gender, age, income, ethnicity). Finally, they were thanked and debriefed.

3.10.3 Results

3.10.3.1 Manipulation Check. As in study seven, I averaged the three manipulation check items to form a manipulation check index ($\alpha = 91$, *Mean* = 6.08, SD = 1.28). According to descriptive statistics, participants in the self-enhancement condition indicated whether they considered the traits from the previously completed self-concept manipulation as traits they envisioned in their ideal selves ($M__self_$ *enhancement* = 5.79, SD = 1.48). Likewise, participants in the self-consistency condition reported a high overlap among the traits in the self-concept manipulation with their view of their actual selves ($M__self_consistency = 6.33$, SD = 1.00). Both conditions induced participants to focus on a specific facet of their self_concept (ideal vs. actual self. Mean scores above the neutral (4) level). Accordingly, the self_concept manipulation successfully induced participants to focus on their ideal (or actual) self. Thus, the self_concept manipulation worked as intended.

3.10.3.2 Savings intentions. I conducted a one-way ANCOVA with tightwadspendthrift scores as a covariate, savings intentions as the dependent variable, and self-concept motive condition (self-consistency vs. self-enhancement vs. control) as the between-subjects factor. The results presented in table 13 revealed a statistically significant effect of self-motives on savings intentions (F(3,258) = 8.56, p < .05), such that those in the self-enhancement condition reported higher savings intentions ($M_{_self-enhancement} = 809.22$) than those in the self-consistency ($M_{_self-consistency} = 706.59$) and control condition ($M_{_control} = 725.02$), which is in line with H2. An analysis of effect size from partial Eta squared, using G*Power v3.1 (Faul et al., 2007), revealed an effect size f = .19, which corresponds to a small effect according to Cohen's guidelines (Rothwell, 2021). A post-hoc analysis of achieved power was conducted using G*Power v3.1 (Faul et al., 2007) that revealed the achieved power for the analysis was β = .74.

Planned contrasts (F(2,258) = 4.58, p < .05) revealed that a self-enhancement motive significantly increased participants' savings intentions, compared to a selfconsistency motive (p < .05, 95% CI [32.59, 158.21]), in line with H2. Likewise, according to the planned contrasts table, savings intentions differ significantly among participants in the control condition, compared to the self-enhancement (marginally significant p = .053, 95% CI [-129.92, .874]). Participants in the self-consistency and control conditions did not differ significantly in their savings intentions (p = .334).

Table 13.

Study 8 Results

Study 8 Descriptive Statistics

Depe	ndent	Variable	: Savings	intentions	(\$1,	,000.0	0)
------	-------	----------	-----------	------------	-------	--------	----

		Std.	
Condition	Mean	Deviation	Ν
Self-enhancement	809.2169	216.07412	83
Self-consistency	706.5895	221.05225	95
Baseline	725.0119	213.99524	84
Total	745.0076	220.92229	262

Study 8 Tests of Between-Subjects Effects

Source	df	F	Sig.
Corrected Model	3	8.561	.000
Intercept	1	410.828	.000
TW_ST_Index	1	14.193	.000
Condition	2	4.576	.011
Error	258		
Total	262		
Corrected Total	261		

Dependent Variable: Savings intentions (\$1,000.00)

a. R Squared = .091 (Adjusted R Squared = .080)

Study 8 Contrast Test Results

Dependent Variable: Savings intentions

Source	df	F	Sig.
Contrast	2	4.576	.011
Error	258		

3.10.3.3 Mediation. I conducted an ordinary least squares regression using SPSS, with self-motive as the independent variable, mental level of construal activation (BIF Index) as the mediator, and intentions to save as the dependent variable. As in the previous studies, the 10 BIF items were combined to form a unified BIF index ($\alpha = .83$, *Mean* = 4.70, *SD* = 1.30). To rule out the effects of chronic differences in spending and saving as a potential alternative explanation, participants' tightwad-spendthrift scores were included in the model as a covariate. Specifically, a bootstrapped mediation model with 5,000 samples using PROCESS Macro - Model 4 (Hayes, 2018) was employed to investigate if the influence of self-motives on savings intentions is mediated by construal level activation, while

controlling for individual differences in savings and spending tendencies. For this analysis, participants in the control condition were not included, since the objective was to examine the mediation role of construal level mindset activation within the self-motives to financial behavior relationship. Thus, the sample size for this analysis is N=178.

According to the results presented on table 14, the regression model with mental level of construal as the dependent variable was statistically significant (R^2 = .06; F(2,175) = 5.30, p < .05). Self-motives impacted participants' mental levels of construal, such that those in the self-consistency condition presented a significantly lower construal level, compared to those in the self-enhancement condition (selfmotive b = -.51, t = -2.74, p < .0595% CI [-.8721; -.1415]). The mediation results showed that the regression model depicting the effects of self-motives on savings intentions as mediated by mental level of construal was significant ($R^2 = .16$; F (3,174) = 11.07, p < .05). The effect of tightwad-spendthrift scores was statistically significant (b = 49.51, t = -2.58, p > .05). The results showed the mental level of construal (b = 46.24, t = -3.64, p < .05) as a significant predictor of savings intentions. The indirect effect of self-motives on savings intentions through mental level of construal activation is statistically significant (b = -23.43, 95% CI -47.2391; -5.3287]). A post-hoc analysis of achieved power was conducted using G*Power v3.1 (Faul et al., 2007) and revealed the achieved power for the analysis was β = .99. Further, an effect size analysis from partial r^2 results using G*Power v3.1 (Faul et al., 2007) depicts a small effect size $f^2 = .11$. Taken together, these results provide support for the mediation hypothesis (H5).

Table 14.

Study 8 Mediation Results

n=178)							
Outcom	ie var	iable: Co	onstrual lev	el minds	set activ	vation (BIF_I	ndex)
Model Summa	ary						
R		R-sq	SE	F	df1	df2	р
.24		.06	1.51	5.30	2	175	.005
Predictor		b	SE	t	р	Lower	Upper
variable							
Constant		5.99	.41	14.73	.001	5.19	6.79
Self-motive		51	.19	-2.74	.006	87	14
TW_ST (cov)		18	.11	-1.55	.123	40	.05
	0	utcome v	ariable: Sa	vings int	tention	s (WTS)	
Model Summa	ary						
	R	R-sq	MSE	F	df1	df2	р
	.40	.16	42896.59	11.07	3	174	.001
Predictor		b	SE	t	р	Lower	Upper
variable							
Constant		776.25	102.59	7.57	.001	573.77	978.73
Self-motive		-72.16	31.87	-2.26	.025	-135.06	-9.27
BIF_Index		46.24	12.75	3.63	.001	21.08	71.39
TW_ST (cov)		-49.51	19.16	-2.58	.011	-87.33	-11.70
Total effect of	the p	redictor	variable (s	elf-motiv	ve) on t	he outcome v	ariable
(WTS)							
		b	SE	t	р	Lower	Upper
		-95.60	32.27	-2.96	.004	-159.2869	-31.9048
Direct effect o	of the	predicto	r variable (self-moti	ives) on	n the outcome	variable
(WTGID)							
		b	SE	t	р	Lower	Upper
		-72.16	31.87	-2.26	.025	-135.0575	-9.2672
Indirect effect	t of th	e predict	tor variable	e (self-mo	otive) o	n the outcom	e variable
(WTS)							
		b	BootSE			BootLower	BootUpper

Study 8 Ordinary Least Squares Regression-based Mediation (FIU sample, n=178)

|--|

Figure E

Study 8 Mediation Figure



3.10.4 Discussion

The results support the prediction that a self-enhancement mindset increases consumers' savings intentions, compared to a self-consistency mindset, thus giving evidence for H2. Furthermore, the results support the prediction that certain selfmotives (self-enhancement vs. self-consistency) impact consumers' savings intentions through their effect on construal level activation, leading to significant differences in debt acquiring intentions. As predicted in H3, the results showed that a selfenhancement (self-consistency) mindset will lead to higher (lower) levels of mental construal, which will, in turn, result in higher (lower) savings intentions.

As in study seven, the self-motive manipulation employed in this study was less blatant compared to the previous (self-discrepancy) one. The sample size for this study was adequate to detect a moderate effect of .25 at an alpha level .05 (n=262). A post-hoc analysis revealed the achieved power for the analysis was β = .99, and an effect size analysis from partial r² results depicts a small effect (f² = .11).

As previously mentioned, by shedding light on how certain self-motives influence consumers' debt behavior intentions, the present study provides novel contributions to the personal financial behavior literature that is significantly relevant to social marketers and policy makers. A practical application of these findings is to use self-enhancement directed communications on educational platforms and advertisements that target economically vulnerable consumers. The following study extends the finding of study eight by investigating the effects of self-motives on a distinct financial behavior: willingness to go into debt.

3.11 Study 9 (approximate replication of study 8, with a different financial behavior -willingness to go into debt)

This study aimed to demonstrate the proposed effects of H4 and H5, namely, the differential impact of self-consistency versus self-enhancement mindsets on debt behavior,²⁴ along with the mediating role of construal level mindset activation. Study nine was an experiment where I manipulated participants' self-motives, either self-

²⁴ Willingness to go into debt was chosen as the dependent variable given its importance to consumer financial well-being (Federal Reserve, 2020). Recent data indicate that eight out of 10 Americans have at least one credit card and over 50% of American households carry a credit card balance, totaling over \$84 billion in outstanding credit card debt (Federal Reserve, 2020).

consistency or self-enhancement, and examined their effect on willingness to go into debt and construal level mindset activation.

3.11.1 Participants and Design

The sample for this study consisted of FIU marketing students who voluntarily completed the experiment in exchange for course credit. Based on the generally accepted power of .80 in psychology (Dattalo, 2008), an a priori power analysis conducted using G*Power v3.1 (Faul et al., 2007) to achieve power to detect a moderate effect of .26 at an alpha level .05 indicates a sample size of 232 is adequate for this analysis. In order to account for unusable data, 239 FIU marketing students (49% male, $M_{age} = 22.32$) were recruited via SONA (internal FIU research system) and randomly assigned (at the beginning of the survey, through Qualtrics randomization protocols) to one of three conditions (groups) in a single factor (self-motives: self-enhancement n=73 vs. self-consistency n=73 vs. control n=93) between subject design.

3.11.2 Procedure

This study, including its cover story, manipulations, battery of measures and demographic questions, was administered using a Qualtrics web survey. The survey was open for four days (from February 23rd to March 04th, 2021), during which participants could complete the study from a web-enabled computer or smart device. First, participants answered an attention check similar to the one used in study nine. Twenty-seven (27) participants failed the attention screening. The data were analyzed with and without these participants, and no change in the significance of the results was observed. Thus, I present the analysis with the whole sample (N = 239). To the

best of my knowledge there were no adverse conditions during the data collection period.

The stimuli used to manipulate self-concept motive mindsets were identical to study eight. Immediately after the self-motive manipulation, the dependent variable, participants' willingness to go into debt (adapted from Wilcox et al., 2011), was measured. This measure of willingness to go into debt was identical as the one used on study four. The variables for WTGID and reported levels of credit card debt were found to be moderately positively correlated, r (239) = .16, p < .02. Subsequently, participants responded to manipulation checks as well as a modified version of the BIF (Sinha & Lu, 2019. $\alpha = .86$, *Mean* = 4.53, *SD* = 1.27) and the tightwad–spendthrift scale (Rick et al., 2008. $\alpha = .71$, *Mean* = 2.96, *SD* = 0.78), which measures individual differences in savings and spending patterns. This variable was used as a statistical control because individual differences in savings and spending patterns are known to influence savings intentions (Rick et al., 2008; Thomas et al., 2011). After completing the tightwad–spendthrift scale, the participants provided their demographic information (gender, age, income, ethnicity). Finally, they were thanked and debriefed.

3.11.3 Results

3.11.3.1 Manipulation Check. As in study eight, I averaged the three manipulation check items to form a manipulation check index ($\alpha = 87$, *Mean* = 5.85, SD = 1.18). According to descriptive statistics, participants in the self-enhancement condition indicated whether they considered the traits from the previously completed self-concept manipulation as traits they envisioned in their ideal selves ($M_{_self}$ -

enhancement = 5.37, SD = 1.33). Likewise, participants in the self-consistency condition reported a high overlap among the traits in the self-concept manipulation with their view of their actual selves ($M_{self-consistency} = 6.29$, SD = .84). Both conditions induced participants to focus on a specific facet of their self-concept (ideal vs. actual self. Mean scores above the neutral (4) level). Accordingly, the self-concept manipulation successfully induced participants to focus on their ideal (or actual) self. Thus, the selfconcept manipulation worked as intended.

3.11.3.2 Willingness to go into debt. I conducted a one-way ANCOVA with tightwad-spendthrift scores as a covariate, willingness to go into debt²⁵ as the dependent variable, and self-concept motive condition (self-consistency vs. self-enhancement vs. control) as the between-subjects factor. The results depicted in table 15 revealed a statistically significant effect of self-motives on debt behavior intentions (F(3,235) = 7.96, p < .05), such that those in the self-enhancement condition reported lower willingness to go into debt ($M_{_self-enhancement} = 121.68$) than those in the self-consistency ($M_{_self-consistency} = 161.36$) and control condition ($M_{_control} = 140.59$), which is in line with H4. An analysis of effect size from partial Eta squared, using G*Power v3.1 (Faul et al., 2007), revealed an effect size f = .31, which corresponds to a moderated effect according to Cohen's guidelines (Rothwell, 2021). A post-hoc analysis of achieved power was conducted using G*Power v3.1 (Faul et al., 2007) that revealed the achieved power for the analysis was β = .99.

Planned contrasts (F(2,235) = 7.83, p < .05) revealed that a self-enhancement motive significantly decreased participants' willingness to go into debt, compared to a

²⁵ The variables WTGID and reported levels of credit card debt were found to be moderately positively correlated, r (239) = .16, p < .02.

self-consistency motive (p < .05, 95% CI [-59.38, -19.87]), in line with H4. Likewise, according to the planned contrasts table, willingness to go into debt differs significantly among participants in the control condition, compared to the self-consistency (p = .024, 95% CI [-40.242, -2.897]) and the self-enhancement (marginally significantly p = .058, 95% CI [-.621, 36.725]) conditions.

Table 15.

Study 9 Results

Study 9 Descriptive Statistics

Dependent Variable: Willingness to go into debt (\$249 retail value)

Condition	Mean	Std. Deviation	Ν	
Self-enhancement	121.6849	59.33565	73	
Self-consistency	161.3562	59.93964	73	
Control	140.5914	64.31786	93	
Total	141.1590	63.18733	239	

Study 9 Tests of Between-Subjects Effects

-	_	-	
Source	df	F	Sig.
Corrected Model	3	7.962	.000
Intercept	1	39.400	.000
TW_ST_Index	1	8.221	.005
Condition	2	7.829	.001
Error	235		
Total	239		
Corrected Total	238		

Dependent Variable: Willingness to go into debt

a. R Squared = .092 (Adjusted R Squared = .081)

Study 9 Test Results

Dependent	Variable:	Willingness	to go into debt
Source	df	F	Sig.

Contrast	2	7.829	.001
Error	235		

3.11.3.3 Mediation. I conducted an ordinary least squares regression using SPSS, with self-motive as the independent variable, mental level of construal activation (BIF_Index) as the mediator, and willingness to go into debt as the dependent variable. As in the previous studies, the 10 BIF items were combined to form a unified BIF index ($\alpha = .86$, Mean = 4.53, SD = 1.27). To rule out the effects of chronic differences in spending and saving as a potential alternative explanation, participants' tightwad-spendthrift scores were included in the model as a covariate. Specifically, a bootstrapped mediation model with 5,000 samples using PROCESS Macro - Model 4 (Hayes, 2018) was employed to investigate if the influence of selfmotives on savings intentions is mediated by construal level activation, while controlling for individual differences in savings and spending tendencies. For this analysis, participants in the control condition were not included, since the objective was to examine the mediation role of construal level mindset activation within the self-motives to financial behavior relationship. Thus, the sample size for this analysis is N=146.

As shown in table 16, the regression model with mental level of construal as the dependent variable was statistically significant ($R^2 = .11$; F(2,143) = 8.92, p < .05). Self-motives impacted participants' mental levels of construal, such that those in the self-consistency condition presented a significantly lower construal level, compared to those in the self-enhancement condition (self-motive b = -.85, t = -4.19, p < .05 95% CI [-1.2501; -.4490]). The mediation results showed that the regression model depicting the effects of self-motives on willingness to go into debt as mediated by mental level of construal was significant ($R^2 = .14$; F(3,142) = 7.74, p < .05). The effect of tightwad-spendthrift scores was not statistically significant (b = 4.44, t = -.40, p > .05). The results showed the mental level of construal (b = -9.99, t = -2.49, p < .05) as a significant predictor of willingness to go into debt. The indirect effect of self-motives on willingness to go into debt through mental level of construal activation is statistically significant (b = 8.49, 95% CI [2.1311; 18.2729]). A post-hoc analysis of achieved power was conducted using G*Power v3.1 (Faul et al., 2007) and revealed the achieved power for the analysis was β = .95. Further, an effect size analysis from partial r² results using G*Power v3.1 (Faul et al., 2007) depicts a small effect size f² = .11. Taken together, these results provide support for the mediation hypothesis (H5).

Table 16.

Study 9 Ordinary Leas	st Square	es Regressi	on-based	Mediati	on (FIU sample	n=146)		
Outcome variable: Construal level mindset activation (BIF_Index)								
Model Summary								
R	R-sq	SE	F	df1	df2	р		
.33	.11	1.50	8.92	2	143	.001		
Predictor variable	b	SE	t	р	Lower	Upper		
Constant	5.61	.50	11.17	.001	4.62	6.60		
Self-motive	85	.20	-4.19	.001	-1.25	45		
TW_ST (cov)	.07	.13	53	.598	19	.33		
Outcome	Outcome variable: Willingness to go into debt (WTGID)							
Model Summary								
R	R-sq	MSE	F	df1	df2	р		
.38	.14	3447.36	7.74	3	142	.001		
Predictor variable	b	SE	t	р	Lower	Upper		

a 1	~		D 1
Study	9	Mediation	Results

Constant	127.05	32.96	3.86	.001	61.90	192.20
Self-motive	31.16	10.30	3.03	.003	10.81	51.52
BIF_Index	-9.99	4.01	-2.49	.014	-17.93	-2.07
TW_ST (cov)	4.44	6.30	.70	.482	-8.01	16.88

Total effect of the predictor variable (self-motive) on the outcome variable (WTGID)

 b	SE	t	р	Lower	Upper
39.66	9.89	4.01	.001	20.1008	59.2160

Direct effect of the predictor variable (self-motives) on the outcome variable (WTGID)

	b	SE	t	р	Lower	Upper
31	1.16	10.30	3.03	.003	10.8057	51.5222

Indirect effect of the predictor variable (self-motive) on the outcome variable (WTGID)

	b	BootSE	BootLower	BootUpper
BIF_Index	8.49	4.14	2.1311	18.2729

Figure F.



3.11.4 Discussion

The results support the prediction that a self-enhancement mindset decreases consumers' willingness to go into debt, and a self-consistency mindset increases consumers' willingness to go into debt, thus giving evidence for H4. Furthermore, the results support the prediction that certain self-motives (self-enhancement vs. selfconsistency) impact consumers' debt behavior through their effect on construal level activation, leading to significant differences in debt acquiring intentions. As predicted in H5, the results showed that a self-enhancement (self-consistency) mindset will lead to higher (lower) levels of mental construal, which will, in turn, result in lower (debt) debt acquiring behavior intentions.

As in study nine, the self-motive manipulation employed in this study was less blatant compared to the previous (self-discrepancy) one. The sample size for this study was adequate to detect a moderate effect of .2 at an alpha level .05 (n=239). A post-hoc analysis revealed the achieved power for the analysis was β = .95 and an effect size analysis from partial r² results depicts a small effect (f² = .11).

As previously mentioned, by shedding light on how certain self-motives influence consumers' debt behavior intentions, the present study provides a novel contribution to the personal financial behavior literature that is significantly relevant to social marketers and policy makers. A practical application of these findings is to use self-enhancement directed communications on educational platforms and advertisements targeted at economically vulnerable consumers. The following study centers on the suggested moderating variable: connectedness to future-self. Specifically, the following study investigates if a stronger (versus weaker) connection to one's future-self bears any impact on the self-motives to financial behavior relationship.

3.12 Study 10

This study aims to establish the moderation role in the relationship between connection to future self, within the self-motives, and savings intentions (H6a and H6b). In other words, the aim is to replicate the findings of study five, within a different financial behavior. Thus, instead of willingness to go into debt, participants' savings intentions was measured.

3.12.1 Participants and Design

The sample for this study consisted of FIU marketing students, who voluntarily completed the experiment in exchange for course credit. Based on the generally accepted power of .80 in psychology (Dattalo, 2008), an a priori power analysis conducted using G*Power v3.1 (Faul et al., 2007) to achieve power to detect a medium effect of .26 at an alpha level .05 indicates a sample size of 195 is adequate for this analysis. In order to account for unnesable data, 199 FIU marketing students were recruited via SONA (internal FIU research system) and randomly assigned (at the beggining of the survey, through Qualtrics randomization protocols) to one of four conditions (groups) in a 2 (self-motives: self-enhancement, self-consostency) X 2 (CTFS: weak, strong) between subject design: self-enhancement X strong CTFS n=40 and self-consistency X weak CTFS n=41.

3.12.2 Procedure

This study, including its cover story, manipulations, battery of measures and demographic questions, was administered using a Qualtrics web survey. The survey

was open for four days (from April 16th to April 20, 2021), during which participants could complete the study from a web-enabled computer or smart device. First, participants answered an attention check similar to the one used in study nine. Thirty-eight (38) participants failed the attention screening and were not allowed to complete the survey. Thus, the data were analyzed without these participants. Accordingly, I present the analysis with the sample that completed the survey (N = 161, 65% female, $M_{age} = 22.55$). To the best of my knowledge there were no adverse conditions during the data collection period.

The stimuli used to manipulate self-concept motive mindsets were identical to study nine. Immediately after the self-motive manipulation, the dependent variable, participants' willingness to save (adapted from Garbinski et al. 2014 and Durante and Laran 2016), was measured. This measure of willingness to save was the same used on study eight. Subsequently, participants responded to manipulation checks as well as a modified version of the BIF (Sinha & Lu, 2019. $\alpha = .83$, Mean = 4.70, SD = 1.30) and the tightwad–spendthrift scale (Rick et al., 2008. $\alpha = .76$, Mean = 2.73, SD = (0.85), which measures individual differences in savings and spending patterns. This variable was used as a statistical control, because individual differences in savings and spending patterns are known to influence savings intentions (Rick et al., 2008; Thomas et al., 2011). After completing the tightwad–spendthrift scale, the participants completed the manipulation checks for connectedness to future-self (same measures used on study five). To test whether participants perceptions of their actual or ideal selves were highly similar with their perceptions regarding their future-self I included a measure of overlap among these dimensions. Specifically, I asked participants the following:

"To what extent will your future-self, who you will be in eight years, possess the traits you listed for your ideal (actual) – self, such as (autofill with the

first five characteristics the participant answered on the self-motives manipulation). *Indicate your opinion about the degree of connectedness held between the person you are now and the person you will be in eight years*". Two response scale achored at 0 = "*not at all*", 5 = "*very much*" and 0 ="*describes my future-self very poorly*", 5 = "*describes my future-self very well*."

Both these measures were averaged and formed a comparison among activated self

and future-self index (CASXFS_Index r = .86 p < .05). An independent samples Ttest revealed no significant difference in overlap scores between self-enhancement and self-consistency (t(1,161) = 1.83, $p > .459^{26}$). This denotes that both self-motive manipulations induced the same extent of future-self overlap in both groups, indicating that the self-motive manipulation did not interefere with the connectedness to future-self manipulation. Finally participants provided their demographic information (gender, age, income, ethnicity). Finally, they were thanked and debriefed.

3.12.3 Results

3.12.3.1 Manipulation Check. Self-motives: As in study nine, I averaged the three manipulation check items to form a manipulation check index ($\alpha = 74$, *Mean* = 6.22, *SD* = 1.90). According to descriptive statistics, participants in the self-enhancement condition indicated whether they considered the traits from the previously completed self-concept manipulation as traits they envisioned in their ideal

²⁶ A non-significant p value denotes that the overlap among the activated self (actual vs. ideal) and the future-self rates for each group did not significantly differ.

selves ($M_{self-enhancement} = 6.19$, SD = .68). Likewise, participants in the selfconsistency condition reported a high overlap among the traits in the self-concept manipulation with their view of their actual selves ($M_{self-consistency} = 6.85$, SD = .89). Both conditions induced participants to focus on a specific facet of their self-concept (ideal vs. actual self), with mean scores above the neutral (4) level. Accordingly, the self-concept manipulation successfully induced participants to focus on their ideal (or actual) self. Thus, the self-concept manipulation worked as intended.

Connectedness to future-self: As in study five, the two measures for participants'

connectedness to their future-selves were averaged to form a connectedness to futureself index (CTFS_Index r = .56 p < .05). I conducted a one-way ANOVA with condition (strong vs. weak connection to future-self) as the independent variable and CTFS_ index as the dependent variable. Participants in the strong connection to future-self condition reported higher levels of connectedness to their future-self ($M_{_{strong_CTFS}} = 68.96$) compared to their counterparts in the weak connection to future-self condition ($M_{_{Weak_CTFS}} = 57.46$), and this difference was significant. (F(1,161) = 13.57, p < .05). These results provide evidence that the proposed measure accurately manipulates participants' level of connectedness to their future-selves.

3.12.3.2 Moderation. An analysis of covariance (ANCOVA) with savings intentions as the dependent variable, self-motives and connectedness to future-self as the factors, and TW_ST scores as a covariate revealed a significant main effect of self-motives (F(1,156) = 6.50, p < .05) and CTFS (F(1,156) = 10.11, p < .05). The effect of the covariate (TW_ST scores) was not significant. More importantly, the interaction effect of self-motives and CTFS was significant (F(1,156) = 4.38, p < 0.05).

.05). According to the simple effects test results, participants motivated to selfenhance demonstrated similar savings intentions, for strong or weak CTFS (M_Selfenhancement_strong = 779.50, SD = 34.02; $M_{Self-enhancement_weak} = 744.64$, SD = 33.17, F (1,156) = .53 p > .47). However, according to the results presented in table 17, participants motivated to maintain self-consistency showed significantly greater savings intentions when induced to a strong (compared to those with a weak) connectedness to their future-self ($M_{Self-consistency_{strong}} = 765.29$, SD = 33.24; $M_{Self-consistency_{strong}} = 765.29$, $M_{Self-consistency_{strong}} = 765.29$, SD = 33.24; $M_{Self-consistency_{strong}} = 765.29$, $M_{Self-consistency_{strong}} = 76$ *consistency_weak* = 589.26, SD = 32.59, F(1,156) = 14.34 p < .05), which is in line with H6a and H6b. It is important to note that, according to the results, the condition selfconsistency / weak connectdness to the future-self ($M_{Self-consistency_weak} = 589.26$) appears to be the one driving the significant effect of the interaction, since this condition is the one that differ among the four condition ($M_{Self-enhancement_strong} =$ 779.50; *M_Self-enhancement_weak* = 744.64; *M_Self-consistency_strong* = 765.29). An analysis of effect size from partial Eta squared, using G*Power v3.1 (Faul et al., 2007), revealed a medium effect size f = .30, which corresponds to a moderated effect according to Cohen's guidelines (Rothwell, 2021). A post-hoc analysis of achieved power was conducted using G*Power v3.1 (Faul et al., 2007) that revealed the achieved power for the analysis was β = .97.

Table 17.

Study 10 Results

Study 10 Descriptive Statistics

Dependent Variable: Savings intentions (\$1,000.00)

			Std.	
Self_Motive	CTFS	Mean	Deviation	Ν
Self-consistency	Weak	587.9268	232.32374	41
	Strong	758.2500	229.01626	40

	Total	672.0370	244.74029	81
Self-enhancement	Weak	738.7500	194.85468	40
	Strong	793.8000	177.95349	40
	Total	766.2750	187.46834	80
Total	Weak	662.4074	226.39312	81
	Strong	776.0250	204.56177	80
	Total	718.8634	222.56557	161

Study 10 Test of Between-Subjects Effects

Dependent Variable: Savings intentions (\$1,000.00)

				Observed
Source	df	F	Sig.	Power ^b
Corrected Model	4	6.516	.000	.990
Intercept	1	164.397	.000	1.000
TW_ST_Index	1	2.968	.087	.402
Self_Motive	1	6.504	.012	.717
CTFS	1	10.113	.002	.885
Self_Motive * CTFS	1	4.377	.038	.548
Error	156			
Total	161			
Corrected Total	160			

Estimates

Dependent Variable:	Savings intentions	(\$1.000.00)
Dependent variable.	but mgs meentions	(\$1,000.00)

				95% Confidence Interval		
Self_Motive	CTFS	Mean	Std. Error	Lower Bound	Upper Bound	
Self-consistency	Weak	589.263 ^a	32.594	524.881	653.646	
	Strong	765.290 ^a	33.242	699.628	830.952	
Self-enhancement	Weak	744.642 ^a	33.166	679.129	810.156	
	Strong	779.498 ^a	34.018	712.302	846.694	

a. Covariates appearing in the model are evaluated at the following values:

TW_ST_Index = 2.9270.

Study 10 Univariate Tests

					Observed
Self_Motive		df	F	Sig.	Power ^a
Self-	Contrast	1	14.338	.000	.964
consistency	Error	156			
Self-	Contrast	1	.525	.470	.111
enhancement	Error	156			

Dependent Variable: Savings intentions (\$1,000.00)

Figure G.

Study 10 Moderation Graph

Estimated Marginal Means of Savings decisions

Now imagine that you were just awarded one-thousand (\$1,000.00) for participating in this study.



With this in mind please indicate how much of this money would you be willing to put away on a savings account for a future purchase or for some unexpected emergency? - How much would you be willing to hold on for savings?

Covariates appearing in the model are evaluated at the following values: TW_ST_Index = 2.9270

3.12.3.4 Moderated mediation.

To investigate the conditional indirect effect of self-motive on savings intentions through construal-level mindset activation as moderated by connectdness to future-self, I used PROCESS Macro Model 14 (Hayes, 2018) to examine the moderated mediation model with bootstrapped samples of 5,000 and 95% confidence intervals. A statistically significant result emerges when the 95% confidence interval of the conditional or unconditional indirect effect estimate does not contain zero. I tested self-motive as a categorical independent variable, dummy-coded CTFS (0 = weak, 1 = strong) as moderator, connectdness to future-self (CTFS) as a categorical mediator, and savings intentions as the dependent variable. To rule out the effects of chronicle differences in savings and spending tendencies as a potential alternative explanation, we added participants' TW_ST scores as a covariate.

The regression model with construal level mindset activation as the dependent variable was statistically significant ($R^2 = .11$; F(2, 158) = 9.56, p < .05). The coefficient for self-motive was statistically significant (b= .76, t= 4.28, p <.05). The overall linear regression model was statistically significant (F(5, 155) = 8.78, p < 100.05), and the predictor variables in the model accounted for approximately 22% of the variance in the dependent variable ($R^2 = .22$). The results that follow, which are presented in Table 18, statistically controlled for the extraneous effect of the participant's chronic diffences in savings and spendings tendencies (TW_ST scores), which were not significant (b = -.30, t = 1.55, p > .12). The results revealed a significant interaction effect for self-motive X CTFS (b = -98.99, t = -3.55, p < .05), such that the strength of the association between self-motive and savings intentions was weaker for participants with a stronger connection to their future-self (b = -.17.67, t = -.81, p > .42) than with a weaker connection to their future-self (b = 81.32, t = 4.37, p < .05). Next, I examined the simple slopes results for the significant interaction effect, depicted in Figure H, which showed that construal-level mindset activation was significantly, positively associated with savings intentions (b = 81.32, t=4.37, p<.05). This association was moderated by the level (strong vs. weak) of

participants' connectedness to their future-selves (b = -98.99, t = -3.55, p < .05). Importantly, the index of moderated mediation is significant, as depicted by its 95% confidence interval that excludes zero (b = -75.14, 95% CI [-140.2682; -26.7425]). A post-hoc analysis of achieved power was conducted using G*Power v3.1 (Faul et al., 2007) and revealed the achieved power for the analysis was β = .99. Further, an effect size analysis from partial r² results using G*Power v3.1 (Faul et al., 2007) depicts a medium effect size f² = .28. These results not only support H6a and H6b, but also add generalizability to the findings, since they replicate the results using a different financial behavior.

Table 18.

Study 10 Mediated Moderation Results

sample n=161)							
Outcome variable: Construal level mindset activation (BIF_Index)							
Model Summary							
R	R-sq	SE	F	df1	df2	р	
.33	.11	1.24	9.56	2	158	.001	
Predictor variable	b	SE	t	р	Lower	Upper	
Constant	3.67	.45	8.07	.001	2.77	4.56	
Self-motive	.76	.18	4.28	.001	.41	1.11	
TW_ST (cov)	03	.11	30	.765	25	.18	
Outcome variable: Willingness to save (WTS)							
Model Summary							

Study 10 Ordinary Least Squares Regression-based Mediated Moderation (F	ΊU
sample n=161)	

Model Summary						
R	R-sq	MSE	F	df1	df2	р
.47	.22	39846.63	8.78	5	155	.001
Predictor variable	b	SE	t	р	Lower	Upper
Constant	298.41	110.02	2.71	.007	81.07	515.75
Self-motive	62.94	33.73	1.87	.064	-3.69	129.57
BIF_Index	81.32	18.62	4.37	.001	44.55	118.10

CTFS	557.93	136.21	4.10	001	288.86	826.99	
Int	-98.98	27.90	-	001	-154.11	-43.87	
(CTFS*BIF_Index)			3.55				
TW_ST (cov)	-30.87	19.91	-	.123	-70.20	8.46	
			1.55				
Conditional effects of	of the foca	al predicto	r at va	lues of	the moderato	r	
Levels of the	b	SE	t	р	Lower	Upper	
moderator							
Low	81.32	18.62	4.37	.001	44.59	118.10	
High	-17.67	21.89	81	.421	-60.91	25.58	
Direct effect of the predictor variable (Self-motives) on the outcome variable							
(WTS)							
	b	SE	t	р	Lower	Upper	
	62.94	33.73	1.87	.064	-3.69	129.57	
Conditional indirect	effect of	the focal p	oredict	or at v	alues of the m	oderator	
Levels of the	b	SE			Boot_Lower	Boot_Upper	
moderator							
Low	61.73	20.29			27.5019	105.0315	
High	-13.91	19.17			-55.9286	21.3469	
Index of Moderated	Mediatio	n (differe	nce bet	ween c	onditional ind	irect effects)	
	Index	SE			Boot_Lower	Boot_Upper	
OTEG							
Figure H.

Study 10 Mediated Moderation Figure



3.12.4 Discussion

The results support the prediction that for self-consistency mindset consumers, greater (lesser) psychological connection with the future self will increase (decrease) savings behavior, thus giving evidence for H6a. Further, the analysis revealed that for self-enhancement mindset consumers, the level of psychological connection with the future self will not be associated with savings behavior, thus corroborating H6b.

As in the previous study, the self-motive manipulation employed in this study was less blatant compared to the previous (self-discrepancy) one. The sample size for this study was adequate to detect a moderate effect of .26 at an alpha level .05 (n=199). A post-hoc analysis revealed the achieved power for the analysis was β = .95, and an effect size analysis from partial r^2 results depicts a moderate effect size ($f^2 = .28$).

By shedding light on the conditions under which certain self-motives influence consumers' savings intentions, the present study provides novel contributions to the personal financial behavior literature that is significantly relevant to social marketers and policy makers. A practical application of these findings is to include elements that heighten consumers' connectedness to their future-selves on communications targeted at retirement advertisement and materials.

CHAPTER 4: DISCUSSION

4.1 General Discussion

Personal finances are a growing concern among Americans. The Federal Reserve estimates that the majority of the population struggles to save for retirement, and less than 10% of the population feels on track with their savings (Board of Governors of the Federal Reserve System, 2018). The 2008 financial crisis and the 2020 ongoing coronavirus pandemic have exposed Americans' lack of savings and its devastating consequences. I argue that the behavioral predicting power demonstrated by self-motives (Baumeister, 1998; Browman et al., 2017; Elmore & Oyserman, 2012; Roccas & Brewer, 2002)., along with its predicted effect on construal-level mindset activation (H1), impact consumer's self-control in the contexts of savings and willingness to go into debt.

Self-motives as well as construal level affect consumer behavior. Yet, an extremely limited amount of literature addresses how the interaction of these two constructs would impact consumers' financial decision making. The current research addresses this gap. In line with my predictions and empirical findings, the selfmotives studied (self-enhancement and self-consistency) impact consumers' savings intentions and willingness to go into debt.

Across ten studies, I was able to answer research question A, identifying the main effect of certain self-motives (self-enhancement and self-consistency) on consumers' savings intentions and their willingness to go into debt. Specifically, self-enhancement motives lead participants to more self-controlled behaviors pertaining to their savings intentions and willingness to go into debt, compared to self-consistency motives. Further, research question B was answered by pinpointing construal level mindset activation as the underlying mechanism for the effects of self-motives on financial behavior. Connectedness to future-self partially elucidates research question

C. The results of the empirical investigations presented in this dissertation suggests that connectiveness to future-self moderates the impact of self-motives on savings intentions (H6a and H6b). However, the same moderating effect is not found for willingness to go into debt (H7a and H7b).

Using a combination of distinct manipulations of self-motive, I explored the hypothesized effects of self-motives on construal-level mindset and financial behavior. The first five studies manipulated self-motives by inducing participants to a self-discrepancy state with a particular facet of their self-concept (e.g., self-enhancement = ideal-self; self-consistency = actual-self). The second set of five studies relied on a self-motives manipulation that did not involve self-discrepancy. Studies six through ten manipulated participants self-motives by prompting them to reflect upon a specific facet of the self-concept e.g., self-enhancement = ideal-self; self-concept e.g., self-enhancement = ideal-self; self-concept e.g., self-enhancement = ideal-self; self-concept e.g., self-enhancement = ideal-self;

The results of the empirical studies established the effects of self-enhancement and self-consistency on savings intentions and willingness to go into debt. Studies one and six confirmed the hypothesized effect that self-motives impact construal-level mindset activation, such that self-enhancement led to higher levels of mental construal whereas self-consistency prompted lower levels of mental construal. Studies two-a, two-b, three, and seven involved savings intentions measures. As expected, participants in the self-enhancement condition reported greater savings intentions compared to participants in the self-consistency condition. Studies three and seven shed light on the underlying mechanism of the effects of self-motives on savings intentions: construal-level mindset activation. Study eight replicated the aforementioned results using a non-student population (AMTurk). Studies four and nine involved a willingness to acquire debt measure. As anticipated, participants in

the self-enhancement condition reported lower disposition to acquire debt. The opposite pattern of behavior was observed for participants in the self-consistency condition, as they presented higher willingness to go into debt. Finally, studies five and ten aimed to test the hypothesized moderating effect of connectiveness to future-self on savings intentions and willingness to go into debt. The results corroborate the hypothesized effect on H6a and H6b: connectiveness to future-self moderates the effects of self-motives on savings intentions. However, the results of the empirical investigation do not confirm the moderating predicted effect of connectiveness to future-self on the effects of self-motives on willingness to go into debt (H7a and H7b).

Collectively, the empirical evidence presented in this dissertation provides effective evidence that self-enhancement (self-consistency) motives enhance (decrease) self-control within the financial decision-making context, through its effect on construal level mindset activation. These findings are supported by robust results from an array of studies that considered a variety of self-motives manipulations, as well as distinct measures of savings intentions. Additionally, the samples were diverse and surveyed before and during the COVID-19 pandemic, providing robustness to the findings. I relied on behavioral lab participants (FIU students) and paid AM Turk workers as well as Qualtrics paid panel. The combined sample across all experiments were N=2143 with ages ranging from 18 to 72, which speaks to the generalizability of the findings. In the following section, I explore the theoretical and practical contributions of this dissertation.

4.2 Theoretical Contribution

This dissertation has important theoretical implications and significantly contributes to the growing financial decision-making scholarship. Researchers have striven to understand the processes by which self-control can be automatically activated (independent of conscious effort to self-regulate) (Fujita, 2011; Fujita & Han, 2009). This research contributes to these efforts by shedding light on how certain self-motives impact consumers' self-control within the financial decision-making context. Specifically, the present manuscript expands the knowledge on how certain facets of the self-concept impact mental level of construal and subsequent self-control within savings intentions and willingness to acquire debt. To the best of my knowledge, this is the first investigation to link self-motives to self-control-oriented behaviors. As the efforts to help consumers make better financial choices grow (Bearden & Haws, 2012; Berman et al., 2016; Fernandes et al., 2014; Netemeyer et al., 2018; Soman et al., 2012), research that sheds light on mechanisms that enhance (or derail) self-control are a major contribution.

Further, this dissertation builds a bridge between self-concept literature, specifically self-motives, and construal level theory. By demonstrating the effects of self-enhancement and self-consistency on consumers' mental level of construal, the current research brings a novel contribution to the self-concept and construal level theory literatures. The mediating role of construal level activation to the effect of selfmotive on financial behavior uniquely contributes to the literature on consumer behavior.

Importantly, the current manuscript brings a novel contribution by integrating yet another facet of the self-concept, the future-self, to the self-motives and financial behavior framework. Specifically, I investigated the moderating role of connectedness

to future-self within the impacts of self-enhancement and self-consistency on savings intentions and willingness to go into debt. As hypothesized, connectedness to futureself indeed moderates the effects of self-consistency on savings intentions (H6a) and bears no moderating impact on the effects of self-enhancement on savings intentions (H6b) or willingness to go into debt (H7b). However, the results of the empirical studies did not corroborate the hypothesized moderating effect of connectedness to future-self on the self-consistency to willingness to go into debt relationship (H7a), opening up an avenue for future research. Collectively, the findings presented in this dissertation are novel and relevant for the self-concept, self-control, construal-level theory and financial decision making literature. Based upon my research, this research is the first to examine how self-motives impact personal financial decision-making.

4.3 Practical Contribution

Successfully managing one's personal finances is one of the biggest challenges of our society. The U.S. Financial Literacy and Education Commission launched a national strategy in 2020 calling for efforts (policies, research and campaigns) to increase financial well-being for US individuals and families. The research regarding American's personal finances is concerning: 51% of Americans consider their financial situation as either "poor" (15%) or "fair" (36%) and half the country consider their financial situation to be getting worse over time (Gallup, 2020). According to the Federal Reserve (2020a), 45 % of US households carry over \$6,300 in credit card debt, totaling a staggering \$770 billion in unsecured credit card debt (Federal Reserve Bank of New York, 2021). Even more disturbing is the level of unpreparedness in American households: Thirty percent of U.S. households report they would not be able to cover a financial emergency over \$400 without resorting to

some sort of loan (Federal Reserve, 2020c). The present dissertation addresses this worrisome scenario by investigating how certain self-motives can increase or hinder self-control within financial decisions.

A practical application of this research findings is to use self-enhancement directed communications on educational material and advertisements that are targeted at economically vulnerable consumers. For instance, policymakers can include language that prompts consumers to reflect upon their ideal-self and engage in selfenhancement motivation in banking communications, such as credit card statements and retirement-savings material. Previous efforts on a similar end have been fruitful. For instance, the CARD Act of 2009 substantially decreased the misconception consumers had regarding the amount of interest, as well as how long it takes to eliminate their balances (Navarro-Martinez et al., 2011; Salisbury, 2014; Soll et al., 2013).

Similarly, companies seeking to increase their employee's retirement savings enrollment can apply the current findings to their campaigns, creating material and scenarios that induce employees to experience a higher connectedness to their futureself as a way to increase their savings behavior. For instance, employees filling out simple sentences such as *"when I am a retiree I will..."* can direct consumers' focus to their future-self, thus heightening savings intentions. Perhaps more importantly, including language that prompts a connection to future-self on material required for early withdrawal of retirement funds can reduce the amount consumers draw out of their retirement savings.

Finally, as some financial institutions seek to re-brand themselves, the current findings are a powerful tool in this endeavor. For instance, Wells Fargo 2019's rebranding campaign stresses the bank's strive for "real change" (Cocheo, 2019). In this

regard Wells Fargo launched their financial wellness initiative, which includes financial health bankers working with consumers to increase their financial well-being (Wells Fargo, 2021). The current findings are especially relevant for such endeavors. It is now up to the social marketers, policymakers and overall financial well-being stakeholders to implement the empirical findings of this dissertation to essentially help consumers make better, more responsible financial choices.

4.4 Limitations and future research opportunities

One limitation of this dissertation is that I examined no more than two selfmotives (e.g., self-enhancement and self-consistency). Thus, future research may aim to shed light on how other self-motives -for instance, how self-knowledge and selfverification- impact consumers' financial behavior. A major limitation of this dissertation is that it tested only behavior intentions. Accordingly, exploring actual savings and indebtedness behavior would add to the robustness of the current findings (Morales et al., 2017). For instance, future research can partner with financial institutions in order to test whether messages that contain self-enhancement (vs. selfconsistency) elements would lead to distinct patterns of behavior. Another limitation of this manuscript is that the majority of the studies were conducted online. It might be beneficial to test these hypotheses in the behavioral lab (in a controlled environment) or, even more interestingly, in field studies with actual monetary transactions. Future research might seek to replicate these findings using real financial behavior. A limitation related to methods is that I excluded the control condition on the mediation analysis for all studies that tested for mediation.

One possible fruitful avenue for future research is to examine more closely the differences across financial behaviors. For instance, a potential line of inquiry is how

willingness to go into debt and savings intentions differ. More importantly, given that the current investigation failed to confirm the moderating role of connectedness to future-self within the self-motives to willingness to acquire debt relationship (H7a), future research might seek to uncover which variable may possibly moderate this effect. Further, it would be interesting to test the effects of self-motives on distinct financial behaviors, such as debt repayment, budgeting, expense and income forecasting as well as behaviors related to investments. Moreover, social market researchers can use the current findings to test if messages with the right fit between self-motive cues and construal level message framing (self-enhancement and highlevel framing) would lead to more effective financial well-being campaigns. Specifically, researchers can test whether the right frame (self-enhancement motives with high-level construal framing) compared to a different pairing (e.g., selfenhancement motives with low-level construal framing) would lead to financial behaviors that are more oriented toward self-control.

4.5 Conclusion

The primary goal of this dissertation was to examine the link between seemingly independent strategies in order to make social marketing efforts, within the domain of financial decision making, more effective. Specifically, by integrating selfmotives, in particular self-enhancement and self-consistency (Baumeister, 1998), with construal level theory (Trope & Liberman, 2003) and future-self considerations, I develop a framework that further underscores the influence of certain self-motives on financial behavior. To this end, the present findings equip financial well-being stakeholders to make the most of this knowledge by enhancing consumers' financial

well-being. I hope that this work inspires researchers to continue advancing knowledge for the greater good, positively impacting the lives of consumers.

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APPENDIX

Table 1.

Summary of Marketing Research Involving Financial Decision Making

Article	Journal	Main findings and contributions.
Yoon and La Ferie (2018) -	JA	Loss framing matched with a self-oriented (family-oriented) appeal for low-level (high)
Saving Behavior Messaging:		construal consumers were most effective. Gain framing was more effective when level
Gain/Loss Framing,		of individual collectivism was not matched with self/family message orientation.
Self/Family Orientations, and		Demonstrates that self-construal is an antecedent for regulatory focus orientations and,
Individual Differences in		as such, impacts the processing of advertisement.
Collectivism		
Di Muro and Noseworthy	JCR	The physical appearance of money can override the influence of denomination. This
(2013) JCR - Money Isn't		suggests that the physical appearance of money matters more than traditionally thought,
Everything, but It Helps If It		and like most things in life, it too is inextricably linked to the social context. It
Doesn't Look Used: How the		exemplifies how social context (pride to show crisp currency to others, lead to less
Physical Appearance of		spending whereas disgust for worn currency lead to high spending) has a direct effect on
Money Influences Spending		savings.
Hansen, Kutzner and Wanke	JCR	Reminders of money trigger abstract (vs. concrete) mental construals. Money primes
(2013) - Money and		caused a preference for abstract over concrete action identifications, instigated the
Thinking: Reminders of		formation of broader categories, and facilitated the identification of global (vs. local)
Money Trigger Abstract		aspects of visual patterns. Money primes caused a focus on central (vs. peripheral)
Construal and Shape		aspects of products and increased the influence of quality of parent brands in evaluations
Consumer Judgments		of brand extensions. Priming with a little money or expenditures did not trigger abstract

		construals, indicating that the association between money and resources drives the
		effect.
Garbinsky, Klesse, Aaker	JCR	Feeling powerful increases savings. This effect is driven by the desire to maintain one's
(2014) - Money in the Bank:		current state. When the purpose of saving is no longer to accumulate money but to spend
Feeling Powerful Increases		it on a status-related product, the basic effect is reversed, and those who feel powerless
Savings		save more. Further, if money can no longer aid in maintaining one's current state
		because power is already secure or because power is maintained by accumulating an
		alternative resource (i.e., knowledge), the effect of feeling powerful on saving
		disappears
Dholakia, Tam Yoon and	JCR	This article develops a Personal Saving Orientation (PSO) scale. PSO emphasizes
Wong (2016) - The Ant and		consistent, sustainable saving activities. PSO moderates the relationship between
the Grasshopper:		Consumers' financial knowledge and their accumulated savings. Additionally, low-PSO
Understanding Personal		consumers are responsive to an intervention to help them save money. The PSO offers
Saving Orientation of		an effective method for understanding differences between consumers in their financial
Consumers.		decision making and behaviors, and it can be used as a guide to encourage consistent
		and sustained saving practices
Ward and Lynch (2019) - On	JCR	High levels of financial responsibility are associated with increases in financial literacy,
a Need-to-Know Basis: How		whereas low levels of financial responsibility are not Consumers develop expertise on a
the Distribution of		"need to know" basis. Offloading responsibility to a relationship partner may eliminate
Responsibility Between		this need in the present, while simultaneously creating barriers to developing expertise
Couples Shapes Financial		when needed in the future.
Literacy and Financial		
Outcomes		
Kettle, Trudel, Blanchard and	JCR	How different monthly repayment allocations, varying from entirely concentrated into
Haubl (2016) - Repayment		one debt account (i.e., a concentrated strategy) to equally dispersed across all debt

Concentration and Consumer		accounts (i.e., a dispersed strategy), influence consumers' motivation to repay their
Motivation to Get Out of		debts. A concentrated (vs. dispersed) repayment strategies tend to boost consumers'
Debtfduclos		motivation to become debt free, leading them to repay their debts more aggressively.
		Importantly, this motivating effect is most pronounced when the repayments are
		concentrated into consumers' smallest accounts because consumers tend to infer overall
		progress in debt repayment from the greatest proportional balance reduction (proportion
		of starting balance repaid) within any one account.
Netemeyer, Warmath,	JCR	This article conceptualizes and develops / validates measures of perceived financial
Fernandes and Lynch (2018) -		well-being as two related but separate constructs: 1) stress related to the management of
How Am I Doing? Perceived		money today (current money management stress), and 2) a sense of security in one's
Financial Well-Being, Its		financial future (expected future financial security). perceived financial well-being is a
Potential Antecedents, and Its		key predictor of overall well-being and comparable in magnitude to the combined effect
Relation to Overall Well-		of other life domains (job satisfaction, physical health assessment, and relationship
Being		support satisfaction).
Soster, Gershoff and Bearden	JCR	The bottom dollar effect increases as effort required to earn budgetary resources
(2014) - The Bottom Dollar		increases, decreases in the presence of windfall gains, and decreases when there is less
Effect: The Influence of		time between budget exhaustion and replenishment. Mediation analyses further
Spending to Zero on Pain of		demonstrate the role of payment pain in the bottom dollar effect.
Payment and Satisfaction		
Hershfield, Goldstein, Sharpe,	JMR	Allowing people to interact with age-progressed renderings of themselves will cause
Fox, Yeykelis, Carstensen,		them to allocate more resources to the future. those who interacted with their virtual
Bailenson (2011) - Increasing		future selves exhibited an increased tendency to accept later monetary rewards over
Saving Behavior Through		immediate ones.
Age-Progressed Renderings		
of the Future Self		

Hohenberger, Lee and	FPR	Willingness to use robo-advisors may be increased with positive emotions (e.g., joy)
Coughlin (2019) - Acceptance		expected from use, while decreased by anticipated negative emotions (e.g., anxiety), and
of robo-advisors: Effects of		that the relationship may be altered by inducing individuals' self-enhancement motives
financial experience, affective		(e.g., possibility of accumulating wealth).
reactions, and self-		
enhancement motives		
Soman and Cheem (2011) -	JMR	Consistent with prior research suggesting that partitioning increases self-control, people
Earmarking and Partitioning -		save more when earmarked money is partitioned into two accounts than when it is
Increasing Savings by Low-		pooled into one account, as this would reduce the "what-the-hell" effect. Additionally,
Income Households		adding a "guilt" of violating the goal of savings, decreased expenditure of money
		earmarked for savings
Mckenzie and Liersch (2011)	JMR	This article illustrates how people systematically underestimate exponential growth.
- Misunderstanding Savings		Majority of participants expect savings to grow linearly rather than exponentially,
Growth: Implications for		leading them to underestimate their account balance at retirement. This leads to
Retirement Savings Behavior		underestimates of the cost of waiting to save, which makes putting off saving more
		attractive than it should be. Highlighting the exponential growth of savings motivates
		people to save more for retirement. Making clear to employees the exponential growth
		of savings before they make crucial decisions about how much to save may be a simple
		and effective means of increasing retirement savings.
Mende and Doorn (2015) -	JSR	This research examines the underlying mechanisms of Financial Counseling, as follows:
Coproduction of		consumers' co-production of financial counseling services is essential to achieve the end
Transformative Services as a		goals (higher credit scores and decreased financial stress. Self-determination theory
Pathway to Improved		based the author's conclusions that financial literacy, consumer involvement, and
Consumer Well-Being:		attachment styles are important drivers of co-production. Involvement plays a
Findings From a Longitudinal		moderating role, such that higher involvement substitutes for lower levels of financial
		literacy and mitigates the negative effects of attachment

Study on Financial		avoidance on co-production.
Counseling		
Rucker, Dubois and Galinsky	JCR	This research examines how consumers' spending on themselves versus others can be
(2011) - Generous Paupers		affected by temporary shifts in their states of power. Individuals experiencing a state of
and Stingy Princes: Power		power spent more money on themselves than on others, whereas those experiencing a
Drives Consumer Spending		state of powerlessness spent more money on others than on themselves. this effect
on Self versus Others		occurs because power and powerlessness affect the psychological utility of self versus
		others, and this in turn affects the monetary worth allocated to spending on self versus
		others. The research makes novel contributions to appreciating how the spending on the
		self versus others varies as a function of psychological states and increases our
		understanding of the role of power in consumer behavior
Tully, Hersshfield and	JCR	Feelings of financial constraint increase consumers' concern about the lasting utility of
Meyvis (2015) - Seeking		their purchases, which in turn increases their preference for material goods over
Lasting Enjoyment with		experiences. This systematic shift is due to an increased concern about the longevity of
Limited Money: Financial		the purchase. These results indicate that financially constrained consumers spend their
Constraints Increase		discretionary money on material purchases as a means of securing long-term
Preference for Material Goods		consumption utility.
over Experiences		
Raghubir and Srivastava	JEP	This article examines consumer spending as a function of payment mode both when the
(2008) - Monopoly Money:		modes differ in terms of payment coupling (association between purchase decision and
The Effect of Payment		actual parting of money) and physical form as well as when the modes differ only in
Coupling and Form on		terms of form.
Spending Behavior		
Weisfeld-Spolter, Sussan,	IJBM	examine the importance of cultural values in financial decision making within the
Rippe and Gould (2018) -		context of Hispanic American consumers. Financial knowledge, attitude, and perceived

Г	T	
Integrating affect, cognition,		control simultaneously influence Hispanic consumers' intentions to purchase financial
and culture in Hispanic		planning products or services. More interestingly, these results confirm that multiple
financial planning		different routes coexist in the decision-making process, especially within the Hispanic
		financial planning context
Tam and Dholakia (2013) -	APS	In contrast to conventional, popular methods that encourage individuals to ignore past
Saving in Cycles: How to Get		mistakes, focus on the future, and set goals to save money, the current proposed method
People to Save More Money		frames the savings task in cyclical terms, emphasizing the present. Cyclical savings
		method was more efficacious because it increased implementation planning and lowered
		future optimism regarding saving money.
Tully and Sharma (2018) -	JCR	Consumers are more willing to borrow for experiential versus material purchases, even
Context-Dependent Drivers		though experiential purchases tend to have a shorter physical duration. This effect
of Discretionary Debt		occurs because purchase timing is more important for experiential purchases—a
Decisions: Explaining		function of consumers' aversion to missing out on planned consumption. As such, the
Willingness to Borrow for		effect is moderated by whether the borrowing decision impacts planned consumption or
Experiential Purchases		not.
Srivastava, Locke and Bartol	JPSP	This research developed a set of scales to measure motives for making money; Further
(2001) - Money and		the authors found that the negative relationship between money importance and
Subjective Well-Being: It's		Subjective Well-being (SWB) was due to the two variables being the result of a
Not the Money, It's the		common cause: the motives of social comparison, seeking power, showing off, and
Motives		overcoming self-doubt.
Nigam, Srivastava and	RBF	This LR examined behavioral finance studies conducted from 2006 to 2015 to map the
Banwet (2016) - Behavioral		behavioral variables in financial decision making.
mediators of financial		Important: No social motives are included in this literature review of 623 papers. Some
decision making – a state-of-		variables identified are: volatility. volume, past performance, social norms, calendar
art literature review		

		anomalies, macro-economics, premium size, access to information, financial literacy,
		among others.
Briley and Aaker (2006) -	JPSP	Culture and subcultures should be accounted for by policymakers. Goals are determined
Bridging the Culture Chasm:		by both cultural background and situational forces; through its impact on goals, culture
Ensuring That Consumers Are		influences the inputs used to make a decision, the types of options preferred, and the
Healthy, Wealthy, and Wise		timing of decisions. The authors highlight the implications of the framework for two
		policy domains: health and finances
O'Neill, Xu, Johnson, Kiss	JPF	This study features analyses of responses to open-ended questions. 69% of the sample
and Buyske (2019) - "As		was under 45. Four key financial decisions were explored: financial goals, home
Soon As" Finances: A		ownership, retirement planning, and student loans. Results indicated that many
Study of Financial Decision-		respondents were sequencing financial priorities instead of funding them
Making		simultaneously, and they were delaying home ownership and retirement savings. Three-
		word phrases like "once I have," "after I [action]," and "as soon as " were noted
		frequently, indicating a hesitancy to fund certain financial goals until achieving others
		(i.e., sequential goal pursuit)
Petersen, Kushwaha and	JM	Financial decisions are a function of consumers' past experiences and interactions with a
Kumar (2015) - Marketing		financial services firm as well as consumers' long-term priorities (e.g., national culture).
Communication Strategies		National culture directly affects consumer financial decision making and moderates the
and Consumer Financial		impact of marketing efforts by the financial services firm, which suggests that financial
Decision Making: The Role		services firms should account for national culture when managing customers
of National Culture		
Sussman and O'Brien (2016)	JMR	Existing research has focused on consumer decisions between savings and discretionary
- Knowing When to Spend:		spending and has proposed interventions to promote savings in these contexts. this
Unintended Financial		article explores whether people spend their savings during emergencies. Six studies
		reveal that people's tendency to preserve savings by borrowing from a high interest rate
Consequences of Earmarking		credit option varies as a function of the savings' intended use. Paradoxically, people are
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to Encourage Savings		most likely to turn to high interest rate credit with the belief that doing so is the
		responsible option
Yoon and Kim (2016)	JMR	how perceived economic mobility moderates the linkage between materialism and
Keeping the American Dream		impulsive spending.
Alive: The interactive Effect		
of Perceived Economic		
Mobility and Materialism on		
Impulsive		
Atlas, Johnson and Payne	JMR	Mortgage decisions are prototypical of consumer financial choices. The model suggests
(2017) - Time Preferences		and data confirm that consumers with greater present bias and long-term discounting
and Mortgage Choice		tend to choose mortgages that minimize up-front costs. However, greater present bias
		decreases homeowners' willingness to abandon a mortgage, locking them into the
		contract. Long-term patience increases mortgage abandonment. This reversal across
		mortgage decisions is difficult for alternative accounts to explain. These results suggest
		that a two-parameter model of time preferences is helpful for understanding how
		homeowners make mortgage decisions
Romero, Craig and Kumar	JMR	Whether and how space-time associations influence future time-related judgments and
(2019) - Mapping Time: How		decisions. For instance, can spatial location cues affect intertemporal decisions? when
the Spatial Representation of		choices are displayed horizontally (vs. vertically), consumers more steeply discount
Time Influences		future outcomes. This effect is serially mediated by attention to time and anticipated
Intertemporal Choices		duration estimates. horizontal (vs. vertical) temporal displays enhance the amount of
		attention devoted to considering the time delay and lead consumers to overestimate how
		long it will take to receive benefits. This research has important implications for
		consumers who want to forgo immediate gratification and for firms that need to manage
		consumers' time perceptions.

Han, Jung, Mittal, Zyung and	JMR	how people's political identity is associated with their financial risk taking. The authors
Adam (2019) - Political		argue that conservatives' financial risk taking increases as their self-efficacy increases
Identity and Financial Risk		because of their greater social dominance orientation, whereas liberals' financial risk
Taking: Insights from Social		taking is invariant to their self-efficacy. the authors articulate and demonstrate the
Dominance Orientation		mediating effect of individuals' focus on the upside potential of a decision among
		conservatives but not liberals
Goldstein, Hershfield and	JMR	This research demonstrates an illusion of wealth and its reversal at higher monetary
Benartzi (2016) - The Illusion		amounts. Monthly amounts of \$500 to \$5,000 have market values of \$100,000 to
of Wealth and Its Reversal		\$1,000,000; however, people seem to be more sensitive to the tenfold increase in
		monthly amounts than to the tenfold increase in lump sums. Middle-aged adults rated a
		relatively small lump sum as more adequate for retirement than an equivalent monthly
		amount. They were also less likely to want to increase their savings rates when exposed
		to a relatively small lump sum rather than an equivalent monthly annuity. We found a
		reversal of this pattern for larger amounts of money.
Durante and Laran (2016) -	JMR	consumers who experience a stressful situation allocate their resources strategically to
The Effect of Stress on		gain control of their environment. Consumers experiencing stress may show increased
Consumer Saving and		saving behavior, which assures them that monetary resources will be available when
Spending		needed. Alternatively, consumers experiencing stress may show increased spending
		behavior, directed specifically toward products that the consumer perceives to be
		necessities and that allow for control in an otherwise uncontrollable environment.
Berman, Tran, Lynch and	JMR	Although consumers generally think that both their income and expenses will rise in the
Zauberman (2016) - Expense		future, they underweight the extent to which their expected expenses will cut into their
Neglect in Forecasting		spare money, a phenomenon the authors term "expense neglect." Expense neglect is due
Personal Finances		in part to insufficient attention toward expectations about future expenses relative to
		future income. "Tightwad" consumers, who are chronically attuned to costs, show less
		severe expense neglect than "spendthrifts," who are less attuned to costs. The authors

		further find that expectations regarding changes in income (and not changes in
		expenses) predict responses to the Michigan Index of Consumer Sentiment, a leading
		macroeconomic indicator. Participants place 2.9 times greater weight on income change
		than they do on expense change when forecasting changes in their financial slack, and
		(2) expense neglect is stronger for distant than for near-future forecasts
Brown and Lahey (2015) -	JMR	Consistent with the idea of small victories, when a task is broken down into parts of
Small Victories: Creating		unequal size, participants perform faster when the parts are arranged in ascending order
Intrinsic Motivation in Task		(i.e., from smallest to largest) rather than descending order (i.e., from largest to
Completion and Debt		smallest). The calibrated model is consistent with the directional predictions of each
Repayment		theory. However, when participants are given choice over orderings, they choose the
		ascending ordering least often. The authors conclude with a discussion of the efficacy of
		this method in stylized debt
		repayment scenarios.
Carlson, Wolfe, Blanchard,	JMR	how consumers adjust their spending under a budget contraction compared with a
Huber and Ariely (2015) -		budget expansion? This research main contribution is showing that prior budget
The Budget Contraction		allocations create allocation quantities that act as important reference points for future
Effect: How Contracting		budget allocation decisions. We also show that part of the utility consumers anticipates,
Budgets Lead to Less Varied		and therefore part of the utility that influences their choices, comes from the losses or
Choice		gains they anticipate relative to the reference quantities obtained from their previous
		budget allocations
Disatnik and Steinhart (2015)	JMR	This research examines consumers' investment decisions in response to new information
- Need for Cognitive Closure,		about changes in uncertainty in financial markets. High rather than low need for
Risk Aversion, Uncertainty		cognitive closure can lead to a lack of openness to new information and therefore may
Changes, and Their Effects on		dilute consumers' tendency to update their investment portfolios in a way that reflects
Investment Decisions		their risk preferences

Durante, Griskevicius, Cantu	JMR	The period near ovulation should boost women's desire for relative status, which should
and Simpson (2014) - Money,		alter their economic decisions. Women near ovulation seek positional goods to improve
Status, and the Ovulatory		their social standing. Ovulation also leads women to pursue positional goods when
Cycle		doing so improves relative standing compared with other women but not compared with
		men. When playing the dictator game, ovulating women gave smaller offers to a female
		partner but not to a male partner. Overall, women's monthly hormonal fluctuations seem
		to have a substantial effect on consumer behavior by systematically altering their
		positional concerns.
Bries and Laporte (2013) - A	JMR	People experiencing financial dissatisfaction may choose and consume food for its
Wallet Full of Calories: The		energy value. Because money and food are closely related, exchangeable resources,
Effect of Financial		financially dissatisfied people may be motivated to replenish their need for financial
Dissatisfaction on the Desire		resources by consuming caloric resources or food energy.
for Food Energy		
Hadar, Sood and Fox (2013) -	JMR	Attempts to increase consumers' objective knowledge (OK) regarding financial
Subjective Knowledge in		instruments can deter willingness to invest when such attempts diminish consumers'
Consumer Financial		subjective knowledge (SK). Investment decisions are influenced by SK, independent of
Decisions		OK. Specifically, (1) willingness to pursue a risky investment increases when SK is
		high (vs. low) relative to a prior investment choice (Study 1); (2) willingness to enroll in
		a retirement saving program is enhanced by asking consumers an easy (vs. difficult)
		question about finance, thereby increasing SK (Study 2); (3) technically elaborating
		information about a mutual fund diminishes SK regarding that investment and decreases
		choice of that fund (Study 3); and (4) consumers invest less money in funds when
		missing information is made salient, holding the objective investment information
		constant (Study 4). The effects in Studies 2–4 are mediated by participants' self-rated
		SK. The authors propose that effective financial education must focus not only on

		imparting relevant information and enhancing OK but also on promoting higher levels
		of SK.
Morrin, Inman, Broniarczyk,	JMR	Choosing from larger fund assortments taxes investors' cognitive resources, which leads
Nenkov and Reuter (2012) -		to more simplified diversification strategies. They find that increasing the fund
Investing for Retirement: The		assortment size decreases the tendency to invest in all available funds (1/n#) but
Moderating Effect of Fund		increases the tendency to spread the invested dollars evenly among the chosen
Assortment Size on the 1/N		alternatives (1/n\$), provided that the number of funds chosen for investment allows for
Heuristic		easy equal dollar allocations.
Zhu, Dholakia, Chen and	JMR	participation in an online community increases consumer's risk-seeking tendencies in
Algesheimer (2012) - Does		their financial decisions and behaviors. Participation in an online community leads
Online Community		consumers to believe that they will receive help or support from other members should
Participation Foster Risky		difficulties arise. Such a perception leads online community participants to make riskier
Financial Behavior?		financial decisions than nonparticipants. Online community members are more risk
		seeking only when they have relatively strong ties with other members; when ties are
		weak, they exhibit similar risk preferences as nonmembers.
Larson and Hamilton (2012) -	JMR	salient price restraints can actually increase consumers' preferences for high-priced,
When Budgeting Backfires:		high-quality items. Making a price restraint salient has the effect of partitioning
How Self Imposed Price		consumers' evaluations of price and quality, leading to larger differences in perceived
Restraints Can Increase		quality between options and a greater focus on quality during the final decision. Thus,
Spending		while budgets can limit spending by eliminating some high-priced options from
		consideration, this research suggests that they can also have the ironic effect of
		increasing consumers' spending relative to a situation in which consumers have not
		imposed a price restraint.
Amar, Ariely, Ayal, Cryder	JMR	Participants consistently pay off small debts first, even though the larger debts have
and Rick (2011) - Winning		higher interest rates. The authors also find that restricting participants' ability to

the Battle but Losing the War:		completely pay off small debts, and focusing their attention on the amount of interest
The Psychology of Debt		each debt has accumulated, helps them reduce overall debt more quickly
Management		
Soman and Zhao (2011) The	JMR	This article examines the effect of the number of goals on consumers' savings behavior.
Fewer the Better: Number of		Drawing from research on implementation intention, the authors show that under certain
Goals and Savings Behavior		conditions, presenting a single savings goal leads to greater savings intention and actual
		savings than presenting multiple savings goals. , the authors propose and demonstrate
		that a single goal evokes a stronger implementation intention, which in turn has a greater
		effect on behavior change. They also show that the advantage of a single goal over
		multiple goals on saving is attenuated when saving is easier to implement or when the
		multiple savings goals are integrated rather than competing among themselves.
Ulkumen and Cheema (2011)	JMR	consumers' savings can be increased or decreased merely by changing the way
- Framing Goals to Influence		consumers think about their saving goals. Consumers can (1) either specify or not
Personal Savings: The Role of		specify an exact amount to save (goal specificity) and (2) focus on either how to save or
Specificity and Construal		why to save (construal level). The results illustrate that specific goals help consumers
Level		save more when the saving goal is construed at a high level but that nonspecific goals
		help consumers save more when the
		saving goal is construed at a low level.
Gal and Mcshane (2012) -	JMR	Should people begin by attempting relatively easy tasks or more difficult ones? How
Can Small Victories Help		might these differing strategies affect the likelihood of completing the overarching goal?
Win the War? Evidence from		(1) closing debt
Consumer Debt Management		accounts is predictive of debt elimination regardless of the dollar balance of the closed
		accounts, whereas (2) the dollar balance of closed accounts is not predictive of debt
		elimination when controlling for the fraction of accounts closed. These findings suggest
		that completing discrete sub-tasks might motivate consumers to persist in pursuit of a
		goal

Winterich and Barone (2011)	JMR	How social identification influences consumer preference for discount-based promotions
- Warm Glow or Cold, Hard		(i.e., cents-off deals) versus donation-based promotions (in which purchase results in a
Cash? Social Identity Effects		donation to a charitable cause). Consumers possessing interdependent self-construals
on Consumer Choice for		prefer donations to a greater extent than those with independent self-construals. These
Donation Versus Discount		effects of self-construal are attenuated if (1) the donation-based promotion does not
Promotions		involve a charity that is identity congruent or (2) a cause-congruent identity is more
		salient than self-construal at the time of decision making. The authors also identify
		boundary conditions of charity efficiency and product type for these self-construal
		effects.
Bolton, Bloom and Cohen	JMR	Debt consolidation loan marketing overemphasizes the short-term benefits (e.g., lower
(2011) - Using Loan Plus		monthly payments) and downplays the considerable downside of these loans (e.g.,
Lender Literacy Information		longer repayment and more total interest paid). a financial literacy intervention
to Combat One-Sided		combining information about loans and lenders can help consumers understand and
Marketing of Debt		respond to debt consolidation loan marketing (whereas a basic financial numeracy
Consolidation Loans		intervention does not).
Navarro-Martinez, Salisbury,	JMR	how minimum required payment policy and loan information disclosed to consumers
Lemon, Stewart, Matthews		influence repayment decisions. While presenting minimum required payment
and Harris (2011) - Minimum		information has a negative impact on repayment decisions, increasing the minimum
Required Payment and		required level has a positive effect on repayment for most consumers. Experimental
Supplemental Information		evidence from U.S. consumers shows that consumers' propensity to pay the minimum
Disclosure Effects on		required each month moderates these effects; U.K. credit card field data indicate that
Consumer Debt Repayment		borrowers' credit limit and balance due also moderate these effects. Disclosing
Decisions		supplemental information, such as future interest cost and time needed to repay the loan,
		does not reduce the negative effects of including minimum payment information and has
		no substantial positive effect on repayments.

Sussman and Olivola (2011) -	JMR	Consumers have a stronger preference to avoid tax related costs than to avoid equal-
Axe the Tax: Taxes Are		sized (or larger) monetary costs unrelated to taxes. Tax aversion affects consumer
Disliked More than		preferences in a variety of domains, including standard store purchases, financial
Equivalent Costs		investments, and job selection. Furthermore, this tendency is most prevalent among
		people who identify with political parties that generally favor less taxation. Finally,
		encouraging participants who identify with "anti-tax" parties to consider positive uses of
		their tax payments mitigates tax aversion
Strahilevitz, Odean and	JMR	Investors' previous experiences with a stock affect their willingness to repurchase that
Barber (2011) - Once Burned,		stock. This behavior reflects investors' emotional reactions to trading and their attempts
Twice Shy: How Naive		to distance themselves from negative emotions (e.g., disappointment, regret). Investors
Learning, Counterfactuals,		are disappointed when they sell a stock for a loss and regret having ever purchased the
and Regret Affect the		stock; these negative emotions deter investors from later repurchasing stocks they sold
Repurchase of Stocks		for a loss. Having sold a stock, investors are disappointed if the stock continues to rise
Previously Sold		and regret having sold the stock in the first place; these negative emotions deter
		investors from repurchasing stocks that go up since being sold. Thus, investors engage
		in reinforcement learning by repurchasing stocks whose previous purchase resulted in
		positive emotions and avoiding stocks whose previous purchase resulted in negative
		emotions.
Lee and Andrade (2011) -	JMR	How emotions influence individual investors' stock trading decisions. The authors
Fear, Social Projection, and		investigate the impact of incidental fear on the decision to sell in a stock market
Financial Decision Making		simulation. The results show that fearful (vs. control) participants sell their stock earlier.
		This effect, however, is contingent on particular features of the market. Fear leads to
		early sell-off when participant believe the value of the stock is peer generated but not
		when they believe the value of the stock is computer generated. Early sell-off as a result
		of incidental fear also occurs when participants believe their risk attitude is common in
		the market but not when they believe their risk attitude is unique. Social projection-

		that is, people's tendency to rely on their current state of mind to estimate other people's
		actions—explains the phenomenon.
Galak, Small and Stephen	JMR	This research investigates the characteristics of borrowers that engender lending through
(2011) - Micro-finance		Kiva, a popular organization that connects individual lenders to borrowers through
Decision Making: A Field		online micro-finance. Lenders favor individual borrowers over groups or consortia of
Study of Pro-social Lending		borrowers, a pattern consistent with the identifiable victim effect. They also favor
		borrowers that are socially proximate to themselves. Across three dimensions of social
		distance (gender, occupation, and first name initial), lenders prefer to give to those who
		are more like themselves.
Herzenstein, Sonenshein and	JMR	How identity claims constructed in narratives by borrowers influence lender decisions
Dholakia (2011) - Tell Me a		about unsecured personal loans. Unverifiable information affects lending decisions
Good Story and I May Lend		above and beyond the influence of objective, verifiable information. As the number of
You Money: The Role of		identity claims in narratives increases, so does loan funding, whereas loan performance
Narratives in Peer-to-Peer		suffers, because these borrowers are less likely to pay back the loan. In addition, identity
Lending Decisions		content plays an important role. Identities focused on being trustworthy or successful are
		associated with increased loan funding but ironically are less predictive of loan
		performance than other identities (i.e., moral and economic hardship). Thus, some
		identity claims aim to mislead lenders, whereas others provide true representations of
		borrowers
Gaurav, Cole and Tobacman	JMR	This article Investigates how different interventions impact the adoption of an
(2011) - Marketing Complex		innovative new financial product (rainfall insurance). A customized financial literacy
Financial Products in		and insurance education module communicating the need for personal financial
Emerging Markets: Evidence		management and the usefulness of formal hedging of agricultural production risks was
from Rainfall Insurance in		offered to randomly selected farmers. The effects of the financial literacy training and
India		three marketing treatments were evaluated using a randomized controlled trial. Financial
		education has a positive and significant effect on rainfall insurance adoption, increasing

		take-up from 8% to 16%. Only one marketing intervention, the money-back guarantee,
		has a consistent and large effect on farmers' purchase decisions. This guarantee,
		comparable to a price reduction of approximately 40%, increases demand by seven
		percentage points.
Schwartz, Luce and Ariely	JMR	This research investigates consumers' reluctance to seek additional advice in the context
(2011) - Are Consumers Too		of having an ongoing relationship with one expert service provider. In health care claims
Trusting? The Effects of		long-term relationships contribute to more expensive, but not necessarily better,
Relationships with Expert		treatment. A series of experiments show that people recognize when they could benefit
Advisers		from a second opinion but are more reluctant to do so when thinking about their own
		providers rather than someone else's. Consumers' reluctance to seek second opinions is
		partially driven by their motivation to preserve relationship harmony, even when it is at
		their own personal expense and well-being
Cook and Sadeghein (2018) -	JPPM	This research investigates the dimensions of perceived scarcity and the ways they work
Effects of Perceived Scarcity		in tandem to negatively influence perceptions and decisions. Internal influences
on Financial Decision Making		(including perceived consequences) and external influences (including decreased
		lending options) lead to results described in this article as the "triple scarcity effect."
		Results show how perceived financial scarcity undermines loan decisions, particularly
		for consumers at the greatest financial risk. Understanding the multi-dimensionality of
		perceived financial scarcity is important for designing preventive measures that improve
		decisions (e.g., not re-borrowing) and decision making (e.g., accurately calculating
		cost). Results from two interventions demonstrate how these improvements are made
		when consumers' perceptions of scarcity are reduced
Haws, Davis, and Dholakia	JPPM	The present research examines how healthy eating and responsible spending outcomes
(2016) - Control over What?		are influenced by low (vs. high) self-control at general and domain-specific levels.
Individual Differences in		Important questions pertain to the theoretical basis of self-control individual differences
		and the relative efficacy of general and domain-specific measures in predicting eating

General Versus Eating and		and spending outcomes. The authors propose a new measurement approach to increase
Spending Self-Control		measurement standardization and the comparability of results in self-control studies and
		empirically demonstrate its value
Besharat, Carrilat and Ladik	JPPM	The authors explore the illusion of goal progress by consumers who own multiple credit
(2014) - When Motivation Is		cards and pay off their debt balances to facilitate the achievement of their sub-goal
Against Debtors' Best		rather than the super-ordinate goal of being debt-free. Debtors use their savings toward
Interest: The Illusion of Goal		the credit card debt they can pay off entirely or substantially, even if it is associated with
Progress in Credit Card Debt		the smallest balance and the lowest annual percentage rate rather than toward the debt
Repayment		with the highest annual percentage rate. When the income available to pay down the
		debt is in the form of effortless money (i.e., windfall or reward money) as opposed to
		hard-earned savings, the tendency to allocate money toward the smallest credit card debt
		is exacerbated. However, people tend to pay their debt more rationally when the number
		of debt accounts increases. Credit card debt repayment decisions depend on the nature of
		the debt (hedonic vs. utilitarian) and the timing of consumption benefits (past vs. future)
Salisbury (2014) - Minimum	JPPM	Disclosing information about the effects of repaying the minimum has little impact on
Payment Warnings and		repayment decisions. However, disclosing information about the effect of choosing an
Information Disclosure		alternative course of action (i.e., a larger repayment amount) yielded a robust effect on
Effects on Consumer Debt		repayment decisions. The findings suggest that cost information increases repayment
Repayment Decisions		amount for some borrowers, whereas time information may decrease repayment for
		others, especially those with little knowledge of interest compounding. This research
		provides some initial evidence of the impact of the CARD Act as well as that of similar
		regulations in Australia and Canada.
Soll, Keeney and Larrick	JPPM	This research identify several judgmental biases related to paying off credit card debt.
(2013) - Consumer		Participants with stronger numerical skills made fewer errors, as did those who used the
Misunderstanding of Credit		new statement format mandated by Congress in the CARD Act of 2009. People
		underestimate how long it takes to eliminate a debt when payments barely cover interest

Card Use, Payments, and		owed. Less numerate people tend to underestimate the monthly payment required to pay
Debt: Causes and Solutions		off a debt in three years, whereas more numerate people tend to overestimate the
		payment. The newly revised statement required by the CARD Act substantially reduced
		these biases. However, even with the new statement, many people still underestimate
		required payments when still using the credit card. Study 3 identifies ambiguities in the
		revised statement that can lead to misjudgments about how much to pay on monthly
		bills
Ellen, Wiener and Fitzgerald	JPPM	Current policies and programs are largely driven by three implicit theories of why
(2012) - Encouraging People		people do and do not save: trait theory, life cycle, and education. The authors' purpose is
to Save for Their Future:		not to identify a singular best theory but rather to demonstrate the need to expand the
Augmenting Current Efforts		theories used to address the retirement savings problem. Toward that end, they
with Positive Visions of the		empirically examine each traditional theory and simultaneously explore the additional
Future		power of complementary theories: future-self theory and imagery. The results show that
		variables grounded in trait theory, life cycle, and education are significantly related to
		retirement planning. Moreover, people who reported greater and more vivid imagery of
		a positive future retired self had engaged in more retirement preparation, accounting for
		a significant amount of variance beyond the traditional theories.
Frank (2011) - Do Credit	JPPM	on average, consumers underestimate their credit card interest rate by 30%–33%.
Card Users Systematically		Penalty rates seem to compound this bias. There is also some evidence that consumers
Underestimate Their Interest		who are more optimistic using other measures derived from the survey tend to
Rates? Evidence from the		underestimate their rate by a larger amount.
Survey of Consumer Finances		
Richins (2011) - Materialism,	JPPM	This research introduces the concept of transformation expectations as an important
Transformation Expectations,		explanatory variable for the relationship between materialism and credit overuse. In
and Spending: Implications		survey research, transformation expectations fully mediate the relationship between
for Credit Use		materialism and credit overuse. Evidence supports the idea that materialism leads

		simultaneously to a more favorable attitude toward debt and a stronger belief that life
		transformations will occur as a result of acquisition, and these two forces work together
		to increase credit overuse
Xiao, Tang, Serido and Shim	JPPM	this study investigates the psychological processes underlying young adults' risky credit
(2011) - Antecedents and		card behaviors and the role of parents and financial knowledge in the financial behavior
Consequences of Risky Credit		of young adults. The results show that both parental norm and parental socioeconomic
Behavior Among College		status are important factors that influence students' risky credit behaviors. Subjective
Students: Application and		financial knowledge does more to prevent risky credit behaviors than objective financial
Extension of the Theory of		knowledge. Finally, behavioral intention is the most important factor in preventing risky
Planned Behavior		credit behaviors and credit card debt accumulation
Bartels and Urminsky (2015)	JCR	Reducing spending in the present requires the combination of being both motivated to
- To Know and to Care: How		provide for one's future self (valuing the future) and actively considering long-term
Awareness and Valuation of		implications of one's choices (awareness of the future). Feeling more connected to the
the Future Jointly Shape		future self—thinking that the important psychological properties that define your current
Consumer Spending		self are preserved in the person you will be in the future— helps motivate consumers to
		make far-sighted choices by changing their valuation of future outcomes (e.g., discount
		factors). However, this change only reduces spending when opportunity costs are
		considered. Correspondingly, cues that highlight opportunity costs reduce spending
		primarily when people discount the future less or are more connected to their future
		selves. Implications for the efficacy of behavioral interventions and for research on time
		discounting are discussed.
Yoon and Kim (2018) -	JCR	Five studies provide converging evidence for the joint effect of perceived economic
Feeling Economically Stuck:		mobility and socioeconomic status (SES) on compensatory behavior, such that low SES
The Effect of Perceived		consumers who perceive low economic mobility (i.e., economically stuck consumers)
Economic Mobility and		seek more variety than other consumers. We trace this effect to these consumers' desire
		to compensate for their low sense of personal control. Furthermore, we show that these

Socioeconomic Status on		consumers' variety-seeking tendency disappears when their sense of control is boosted
Variety Seeking		by other means or when the more varied option is not associated with a sense of control.
		Alternative explanations based on instrumental benefits, reactance, and affect were
		tested and did not account for the effect. Thus, the current research provides fresh
		insights to consumer research by contributing to the literature on compensatory
		behavior, variety seeking, and SES.
Park and Sela (2018) - Not	JCR	people perceive financial decisions—more so than decisions in many other equally
My Type: Why Affective		complex and important domains—as compatible with a cold, analytical mode of
Decision Makers Are		thinking and as highly incompatible with feelings and emotions. Consequently, the more
Reluctant to Make Financial		people perceive themselves as inclined to rely on affect in their decisions, the more they
Decisions		experience self-concept incongruity with financial decisions (i.e., feeling that financial
		decisions are "not them"), and consequently show an increased tendency to avoid such
		decisions
Duclos, Wan, and Jiang	JCR	How feeling isolated or ostracized causes consumers to pursue riskier but potentially
(2013) - Show me the honey!		more profitable financial opportunities. These daring proclivities do not appear driven
Effects of social exclusion on		by impaired affect or self-esteem. Rather, interpersonal rejection exacerbates financial
financial risk-taking		risk-taking by heightening the instrumentality of money (as a substitute for popularity)
		to obtain benefits in life. Invariably, the quest for wealth that ensues tends to adopt a
		riskier but potentially more lucrative road
Sharma and Alter (2012) -	JCR	consumers counteract the relative deficit in their financial resources by acquiring goods
Financial Deprivation		that are consequently unavailable to other consumers in their environment. The results
Prompts Consumers to Seek		from five studies suggest that the inferiority and unpleasant affect associated with
Scarce Goods		financial deprivation motivates consumers to attend to, choose, and consume scarce
		goods rather than comparable abundant goods. These effects diminish when scarce
		goods are limited because other people have already obtained them and when consumers
		attribute their unpleasant feelings to a source unrelated to financial deprivation.

Sussman and Alter (2012) -	JCR	While people are fairly adept at budgeting and predicting how much they will spend on
The Exception Is the Rule:		ordinary items, they both underestimate their spending on exceptional purchases overall
Underestimating and		and overspend on each individual purchase. Based on the principles of mental
Overspending on Exceptional		accounting and choice bracketing, we show that this discrepancy arises in part because
Expenses		consumers categorize exceptional expenses too narrowly, construing each as a unique
		occurrence and consequently overspending across a series of discretely exceptional
		expenses
Laran (2010) - Choosing	JCR	self-control is dependent on the content of currently active information in decisions for
Your Future: Temporal		the future. When indulgence information is currently active, decisions for the future tend
Distance and the Balance		to be oriented toward self-control. When self-control information is currently active,
between Self-Control and		decisions for the future tend to be oriented toward indulgence. In four experiments
Indulgence		investigating two self-control domains (healthy eating and saving money), we find
		evidence for an information activation/ inhibition account of the influence of temporal
		distance on self-control decisions
Lynch, Netemeyer, Spiller	JCR	Development of a scale to measure individual differences in propensity to plan. Scale
and Zammit (2010) - A		measures and actual planning measures show that for time, people plan much more for
Generalizable Scale of		the short run than the long run; for money, short- and long-run planning differ less. A
Propensity to Plan: The Long		"very long-run" money adaptation predicts FICO credit scores; low planners thus face
and the Short of Planning for		materially higher cost of credit.
Time and for Money		
Bartels and Urminsky (2011)	JCR	This article explores the role of the future self within patience and willingness to forgo a
- On Inter-temporal		present benefit for a larger reward in the future. The less consumers are closely
Selfishness: How the		connected psychologically to their future selves, the less willing they will be to forgo
Perceived Instability of		immediate benefits in order to ensure larger deferred benefits to be received by that
Identity Underlies Impatient		future self. When consumers measured or manipulated sense of continuity with their
Consumption		future selves is lower, they accept smaller-sooner rewards, wait less in order to save

		money on a purchase, require a larger premium to delay receiving a gift card, and have
		lower long-term discount rates
Thomas, Desai and	JCR	The pain of paying in cash can curb impulsive urges to purchase such unhealthy food
Seenivasan (2011) - How		products. Credit card payments, in contrast, are relatively painless and weaken impulse
Credit Card Payments		control. Consequently, consumers are more likely to buy unhealthy food products when
Increase Unhealthy Food		they pay by credit card than when they pay in cash
Purchases Visceral		
Regulation of Vices		
Ordabayeva and Chandon	JCR	greater equality increases the satisfaction of those in the lowest tier of the distribution
(2011) - Getting Ahead of the		because it reduces the possession gap between what they have and what others have.
Joneses: When Equality		However, greater equality also increases the position gains derived from status-
Increases Conspicuous		enhancing consumption, since it allows low-tier consumers to get ahead of the higher
Consumption among Bottom-		proportion of consumers clustered in the middle tiers. As a result, greater equality
Tier Consumers		reduces consumption when consumers focus on the narrower possession gap, but it
		increases consumption when they focus on the greater position gains (i.e., when
		consumption is conspicuous, social competition goals are primed, and the environment
		is competitive).
Eriksson, Simpson and	JPSP	Previous research has indicated that being pro-social rather than selfish has positive
Strimling (2020) - Generosity		consequences for psychological well-being, physical health, and relationships. Here we
Pays: Selfish People Have		instead examine the consequences for individuals' incomes and number of children, as
Fewer Children and Earn Less		these are the currencies that matter most in theories that emphasize the power of self-
Money		interest, namely economics and evolutionary thinking. pro-social individuals tend to
		have more children and higher income than selfish individuals. An additional survey
		(Study 5) of lay beliefs about how self-interest impacts income and fertility suggests one
		reason selfish people may persist in their behavior even though it leads to poorer
		outcomes: people generally expect selfish individuals to have higher incomes.

Matz and Gladstone (2020) - Nice Guys Finish Last: When and Why Agreeableness Is Associated With Economic Hardship	JPSP	Recent research suggests that agreeable individuals experience greater financial hardship than their less agreeable peers. We explore the psychological mechanisms underlying this relationship and provide evidence that it is driven by agreeable individuals considering money to be less important, but not (as previously suggested) by agreeable individuals pursuing more cooperative negotiating styles. we further hypothesize that placing little importance on money—a risk factor for money mismanagement—is more detrimental to the financial health of those agreeable individuals who lack the economic means to compensate for their predisposition. Supporting this proposition, we show that agreeableness is more strongly (and sometimes exclusively) related to financial hardship among low-income individuals.
Shang, Reed and Croson (2008) - Identity Congruency Effects on Donations	JMR	Consumers give more money to a public radio station if they are told that a previous donor who shares their identity also made a large contribution. This effect is more likely to occur when consumers have high collective-identity esteem and when attention is focused on others.
Belmi, Neale, Reiff and Ulfe (2019) - The Social Advantage of Miscalibrated Individuals: The Relationship Between Social Class and Overconfidence and Its Implications for Class-Based Inequality	JPSP	Different social class contexts have powerful effects on people's sense of self, we propose that social class shapes the beliefs that people hold about their abilities, and that this, in turn, has important implications for how status hierarchies perpetuate. We first hypothesize that compared with individuals with relatively low social class, individuals with relatively high social class are more overconfident. Then, drawing on research suggesting that overconfidence can confer social advantages, we further hypothesize that the overconfidence of higher class individuals can help perpetuate the existing class hierarchy: It can provide them a path to social advantage by making them appear more competent in the eyes of others. A multi-phase study that featured a mock job interview in the laboratory, found that compared with their lower-class counterparts, higher-class individuals were more overconfident; overconfidence, in turn, made them appear more competent and more likely to attain social rank.

Steinhart and Jiang (2019) -	JPSP	This research examines when and why a threat to self-image influences saving
Securing the Future: Threat to		intentions. When individuals experience a self-image threat, they generate negative
Self-Image Spurs Financial		expectations about their future. Consequently, these individuals show a greater
Saving Intentions		propensity to save money compared with non-threatened individuals. This effect
		diverges from the effects of environmental threats (e.g., resource scarcity) on saving;
		and it is more likely to occur among individuals with strong rather than weak beliefs in
		the instrumentality of money. The relationship between self-image threat and saving
		intentions is attenuated under the following conditions: (a) when individuals are induced
		to adopt positive future expectations; (b) when individuals perceive themselves as
		having abundant social connections, a perception that buffers their anxiety about the
		future; or (c) when individuals' attention is directed, through self-affirmation, to
		important aspects of their lives that are irrelevant to the threat.
Cheung and Lucas (2016) -	JPSP	Previous research has shown that having rich neighbors is associated with reduced levels
Income Inequality Is		of subjective well-being, an effect that is likely due to social comparison. The current
Associated With Stronger		study examined the role of
Social Comparison Effects:		income inequality as a moderator of this relative income effect. People are more
The Effect of Relative Income		strongly influenced by the income of their neighbors when income inequality was high.
on Life Satisfaction		
DeVoe, House and Zhong	JPSP	The proliferation of fast-food restaurants over the past 3 decades in the developed world
(2013) - Fast Food and		was associated with a historic shift in financial impatience, as manifested in
Financial Impatience: A		precipitously declining household savings rates. households saved less when living in
Socioecological Approach		neighborhoods with a higher concentration of fast-food restaurants relative to full-
		service restaurants. A higher concentration of fast-food restaurants within one's
		neighborhood is associated with greater financial impatience. Recalling a recent fast
		food, as opposed to full-service, dining experience at restaurants within the same
		neighborhood induced greater delay discounting, which was mediated behaviorally by

		how quickly participants completed the recall task itself. Lastly, pedestrians walking
		down the same urban street exhibited greater delay discounting in their choice of
		financial reward if they were surveyed in front of a fast-food restaurant, compared to a
		full-service restaurant. Collectively, these data indicate a link between the prevalence of
		fast food and financial impatience across multiple levels of analysis and suggest the
		plausibility impatience across multiple levels of analysis and suggest the plausibility of
		fast food having a reinforcing effect on financial impatience. The present investigation
		highlights how the pervasiveness of organizational cues in the everyday social ecology
		can have a far-ranging influence
Griskevicius, Tybur,	JPSP	How sex ratio influences saving, borrowing, and spending in the United States. Findings
Ackerman, Delton and		show that male-biased sex ratios (an abundance of men) lead men to discount the future
Robertson (2012) - The		and desire immediate rewards. Male-biased sex ratios decreased men's desire to save for
Financial Consequences of		the future and increased their willingness to incur debt for immediate expenditures. Sex
Too Many Men: Sex Ratio		ratio appears to influence behavior by increasing the intensity of same-sex competition
Effects on Saving, Borrowing,		for mates. Accordingly, a scarcity of women led people to expect men to spend more
and Spending		money during courtship, such as by paying more for engagement rings. These findings
		demonstrate experimentally that sex ratio influences human decision making in ways
		consistent with evolutionary biological theory.
Garbinsky and Gladstone	JCP	couple members who spend from a joint bank account are more likely to choose
(2018) - The Consumption		utilitarian (vs. hedonic) products, than those who spend from a separate bank account.
Consequences of Couples		These different spending patterns are driven by an increased need to justify spending to
Pooling Finances		one's partner.
Hamilton, Shah, Mittal,	JCP	The development of a framework regarding financial constrain, which is rooted in
Griskevicius and Thompson		literatures on resource scarcity, choice restriction, social comparison, and environmental
(2018) - How Financial		uncertainty. The framework highlights different temporal stages of responding to
Constraints Influence		financial constraints, distinguishing between reacting, coping, and adapting. Beyond the

Consumer Behavior: An		obvious negative effects of financial constraints, the framework emphasizes consumer
Integrative Framework		resilience,
Mazar, Ariely and Mochon	JCP	This research tests the efficacy of a prompt under a minimalist automated calling setting,
(2018) - If You Are Going to		where respondents were only prompted to indicate a narrower duration within which
Pay Within the Next 24		they intent to act. In afield experiment, this planning prompt significantly helped people
Hours, Press 1: Automatic		to pay their past dues and get out of debt delinquency. These results suggest that
Planning Prompt Reduces		minimalist automatic planning prompts are a scalable, cost-effective intervention.
Credit Card Delinquency		
Chen, Xu and Shen (2017) -	JCP	Priming people with a concept of a credit card as the payment method could lead them
Go beyond just paying:		to construe information more abstractly than priming them with a concept of cash as the
Effects of payment method on		payment method.
level of construal		
Salisbury and Nenkov (2016)	JCP	Mortality salience decreases how likely individuals are to put savings into an annuity.
- Solving the annuity puzzle:		The authors identify mortality salience as a reason why so few consumers buy annuities,
The role of mortality salience		complementing previous explanations examined in the economic literature.
in retirement savings		
decumulation decisions		
Xu, Zhou, Ye and Zhou	JCP	This research examined whether perceived social support reduces spending pain. Results
(2015) - Perceived social		indicated that both real and recalled social support reduced spending pain. and that
support reduces the pain of		perceived social support reduced the perceived importance of money as a protection
spending money		mechanism, which in turn reduced spending pain. Moreover, the pain-buffering effect of
		social support was stronger for hedonic purchases than for utilitarian purchases.
Besharat, Varki and Craig	JCP	the effects of the type (hedonic or utilitarian) and the timing of debt on consumers' debt
(2015) - Keeping consumers		repayment when managing multiple debt accounts. Consumers can behave irrationally
in the red: Hedonic debt		by paying down smaller balances rather than balances with higher interest rates, we

prioritization within multiple		found that debts incurred for hedonic purchases and in the distant past (versus proximal
debt accounts		past) amplify this effect. The anticipated impact of debt repayment on consumption
		enjoyment is found to mediate this effect.
Duclos (2015) - The	JCP	whether and how visual biases in data interpretation impact financial decision-making
psychology of investment		and risk-taking.
behavior:(De) biasing		
financial decision-making one		
graph at a time		
Huang, Zhang, Hui and Wyer	JCP	Warm (vs. cool) temperatures dispose consumers toward using others' opinions as the
(2014) - Warmth and		basis for product preferences, stock price forecasts, and betting. Warm temperatures
conformity: The effects of		increased the participants' perceptions of social closeness to other decision-makers, thus
ambient temperature on		leading them to consider the opinions of those decision-makers to have greater validity.
product preferences and		This enhanced validity, in turn, rendered them more likely to conform to the crowd.
financial decisions		
Hershfield and Roese (2015) -	JCP	consumers who were given a dual payoff scenario (i.e., how much is paid in total based
Dual payoff scenario		on the minimum payment and also based on a 3-year pay-off window) on credit card
warnings on credit card		statements recommended lower payments than those given a single payoff scenario
statements elicit sub-optimal		(when the 3-year payment amount was less than what they would have paid otherwise),
payoff decisions		and were less likely to pay off the balance in full. The effect is driven by a tendency of
		consumers to infer that the 3-year payment amount is the most appropriate. The dual-
		scenario effect is minimized by an intervention that draws attention away from the 3-
		year payment amount.

VITAE

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EDUCATION

2003 - 2007	Bachelors in Hospitality Management Univesidade Estacio de Sa (UNESA), Rio de Janeiro, Brazil
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2018-2019	Business Doctoral Student Association (BDSA) • Committee Member • Treasurer
2018-present	Beta Gamma Sigma academic honor society Florida International University
2018-present	FIU College of Business Research Participation System (SONA)Assistant Coordinator
2019	Valuing Diversity Scholarship American Marketing Association
2019-2020	PhD Project Marketing Doctoral Student Association (MDSA)Committee MemberSecretary
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PUBLICATIONS AND PRESENTATIONS

Aguirre-Rodriguez, Alexandra, Torres, Patricia, Bagozzi, Richard, and Tam, Leona. "Appetitive Desire and Volitive Desire as Antecedents of Goal-Directed Action Intentions," • Under 3 rd round of review at Psychology and Marketing Rodriguez, Alexandra, Torres, Patricia, and Tavallaei, Stella. "How an Ethnic Congruity Motive in Interpersonal Service Encounters Influences Hispanic Customer Service Satisfaction"

• Revise and re-submit at the Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior

Dickson, Peter, Alzanbagi, Mohammed, Campos Sousa, Ellen, Serin, Nuket, Torres, Patricia. "The New Product Codevelopment Effort of Salespeople,"

• Under review at Journal of Product Innovation Management SELECTED WORK IN PROGRESS

Torres, Patricia, Miniard, Paul W., Van Solt, Michelle, and Aguirre-Rodriguez, Alexandra. "Pleasure and Pain: The Role of Anticipatory Pleasure on Time of Consumption and Pain of Payment"

• Status: preparing for submission to the Journal of Business Research.

• Planned Submission Date: Summer 2021

Torres, Patricia, and Aguirre-Rodriguez, Alexandra. "It is All in Your Head: How Personal Beliefs affect Consumer Financial Behavior"

• Best Student Paper award winner – Association of Marketing Theory and Practice (AMTP) 2020

• 2 of 4 planned studies complete, targeted toward Journal of the Association for Consumer Research

• Planned Submission Date: Spring 2022

Torres, Patricia, "Status Symbol of Choice. How Stigma Reflects in the Low-Income Consumer's Product Selection"

• 1 of 4 planned studies completed, targeted toward Journal of Consumer Psychology.

• Planned Submission Date: Summer 2022

Torres, Patricia and Aguirre-Rodriguez, Alexandra. "How Self-Reflection Impacts Consumer Financial Decision Making"

• Status: 5 of 8 planned studies complete, targeted toward the Journal of Marketing Research

• Planned Submission Date: Fall 2021

Torres, Patricia, and Alexandra Aguirre Rodriguez. "If I Think I can, Then I can. Can't I? Association of Consumer Research, Online, October 2020

Torres, Patricia, and Alexandra Aguirre Rodriguez. "It is All in Your Head: How Personal Beliefs affect Consumer Financial Behavior." Association of Marketing Theory and Practice Conference, Sandestin FL, August 2020 (in a competitive paper session. Best Student Paper award winner) Conference Proceedings