

# The Effect of Lifestyle-Based Depletion on Teen Consumer Behavior

Detra Y. Montoya and Maura L. Scott

*Consumer overspending and lack of adequate savings have a significant economic impact and thus are high-profile issues for policy makers. The authors examine the overspending phenomenon from the perspective of resource depletion and role stress theories. They explore factors that influence consumer and financial decision-making quality among the teenaged consumer segment, conducting two studies—a survey and a series of depth interviews—with middle school and high school teenagers. The results suggest that lifestyle-based depletion (1) can affect consumption patterns among teens and (2) is prevalent among ethnic teenagers, girls, and teens with weak parental relationships. The authors provide recommendations to help guide further policy research and aid policy decision makers.*

**Keywords:** overconsumption, resource depletion, financial decisions, self-regulation, teens, ethnicity

Families in the United States increasingly experience pressure from financial stress (American Psychological Association [APA] 2009; Peck 2010). Despite important contributions to the literature on financial literacy, research has not identified how day-to-day stressors may influence the abilities of adult and teenaged consumers to exert self-control when making consumer financial decisions. Regulatory policies and statutes aim to help consumers make better long-term financial decisions by protecting them from predatory practices and enhancing their ability to evaluate financial information (e.g., Dodd-Frank Act [H.R. 4173]). In addition, some states have implemented educational programs to promote teen financial literacy (Mandell 2008). Despite these policies and programs, however, low financial literacy continues to be a major societal concern (Council for Economic Education 2012; Lusardi 2008).

Prior studies have focused on the micro and macro impacts of consumer financial decision-making quality (Lusardi, Mitchell, and Curto 2010) and on the antecedents and outcomes of financial literacy among adults and teenagers (Perry

and Morris 2005). The financial decisions adolescents make today (e.g., saving money) can have significant long-term individual and societal effects. Studies have investigated some psychosocial factors influencing financial decision making among adults (e.g., a 2011 special issue of *Journal of Marketing Research*), but such factors have not been examined among teenagers. Thus, psychosocial factors influencing the development of consumer financial decision-making abilities, particularly the interrelationship between consumer decisions and financial stress, are not well understood.

Although understanding the financial decision-making behavior of adults is critical, gaining insights into teenager decision making can help inform the development of such behaviors. Teenagers are simultaneously developing as consumers and contributing to the economy (e.g., working, spending, saving); in turn, such actions provide a valuable lens to understand how and why specific types of financial behaviors develop. Teenaged consumers' financial decisions are often overlooked (Adkins and Ozanne 2005; Mick 2006) despite the relevance of their experiences for consumer protection policies (Perry and Ards 2002). Extant research has examined the impact of stress on (1) consumers' ability to manage their roles and responsibilities (Reilly 1982), (2) consumers' ability to exert self-control (Baumeister et al. 1998), and (3) teenagers' behavior in response to family dynamics (Williams and Prohovsky 1986). We build on this conceptual base to uncover new theoretical insights underlying the psychosocial factors influencing teenagers' financial decision-making quality.

Three objectives guide our research. First, we develop and test a model that helps explain why teenaged consumers may, at times, make financial decisions that are against their long-term best interests. Second, we contribute to theory by drawing on resource depletion and role stress theories to understand how teenaged consumers experience and cope with chronic stress and its downstream effects on financial decision making. Third, we determine whether

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teens experience chronic regulatory resource-depleting influences, such as family and social demands, which we refer to as “lifestyle-based depletion.” We define lifestyle-based depletion as a chronic depleted state that people reach as a result of stressors due to societal, social, or familial challenges. Depleting stressors may influence teen financial decision making, such as saving versus spending and debt accumulation decisions. We consider the extent to which depleting pressures from ethnicity (Williams and Collins 1995), gender (Durkin and Paxton 2002), parental relationships (Chandra and Batada 2006; Wolchik et al. 1989), and self-esteem (Orth, Robins, and Meier 2009) contribute to teens’ financial decision-making quality. We examine the impact of lifestyle-based depletion among teens on saving versus spending behaviors (Study 1) and on actual teen shopping and spending choices (Study 2).

## Lifestyle-Based Depletion

This research explores the factors that may result in higher levels of lifestyle-based depletion. Higher depletion levels can hinder a consumer’s ability to self-regulate, such as overcoming the desire to spend now and instead save for the future (Baumeister and Vohs 2007). Individual-level factors, such as self-esteem, gender, ethnicity, and relationships with parents, may influence the effects of teenagers’ lifestyle-based depletion on financial decision-making quality (see Figure 1).

## Regulatory Depletion and Chronic Stress

Consumers have limited self-regulatory resources to exert self-control (Vohs, Baumeister, and Tice 2008), and these resources are further diminished when chronic stressors create high levels of lifestyle-based depletion. Stressors, such as regulating emotions (Muraven, Tice, and Baumeister 1998) or engaging in problem solving (Schmeichel, Vohs, and Baumeister 2003), can deplete self-regulation energy. Depleted consumers are more vulnerable to self-control lapses (Baumeister and Vohs 2007), such as impulse purchasing (Vohs and Faber 2007) or poor performance on cognitive tasks (Muraven, Tice, and Baumeister 1998). Ongoing pressure from environmental forces that tax or exceed a person’s resources can create stress and sustainably decrease the ability to self-regulate (Folkman and Lazarus 1985). A stressor, such as role overload, or the feeling of being overwhelmed in understanding and executing

one’s responsibility in a given role (Reilly 1982), may contribute to lifestyle-based depletion. Teenagers may experience role overload as a result of enacting multiple roles, such as student, caregiver (e.g., teen girls helping raise siblings; Larson and Verma 1999), and household contributor (e.g., paying household bills).

Research on willpower and self-regulation has uncovered a “cooling” strategy to help depleted consumers overcome self-control lapses. Stress activates an internal hot system, which is depleting because it compels consumers toward more impulsive and sensory-focused choices; in contrast, the cool system guides rational, long-term-focused choices (Metcalfe and Mischel 1999; Scott et al. 2008). Thus, a strategy to activate the cool system may mitigate impulsive choices made under stress. Policies in other domains use cooling techniques; for example, the Brady Law mandates a five-day cooling-off period to reduce impulsive handgun purchases (<http://www.atf.gov/firearms/brady-law/>). Research has not provided information as to how this mechanism works for teenagers making financial decisions or whether the cool system can be cultivated to influence financial choices.

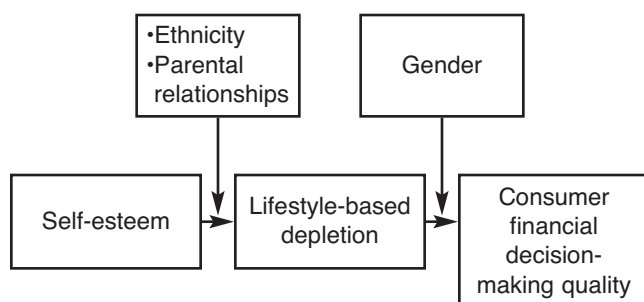
## Teenagers, Regulatory Depletion, and Financial Decision Making

The ability to evaluate long-term consequences is essential to successful financial decision making. Teens develop financial behaviors that can influence their actions as adults (Martin and Oliva 2001), such as making the strategic choice to delay gratification by saving and avoiding a debtor’s prison (Bernthal, Crockett, and Rose 2005). Teens experience stress from school, family, and finances at *higher* levels than their parents realize (APA 2009). Teenagers in the United States possess significant spending power (\$116 billion; Youth Pulse 2010), with increased access to cosigned or parent’s credit cards (Jumpstart.org). Teenagers also frequently visit shopping centers and are targets for luxury goods (Dunleavy 2006). However, 48% of U.S. teenagers have low financial literacy (Mandell 2008), and ethnic and female teens lag further behind (Lusardi, Mitchell, and Curto 2010). This combination of access to money or credit, being presented with offers, and low financial literacy and high stress can be problematic. Understanding which factors may improve this segment’s financial decision making could help inform the design of financial education interventions and regulatory policy and guide companies that market to teenagers to improve industry self-regulation.

## The Role of Self-Esteem, Ethnicity, and Gender in Regulatory Depletion

Self-esteem, ethnicity, and gender may deplete regulatory resources (Johns, Inzlicht, and Schmader 2008). Exposure to negative stereotypes and unrealistic media images can reduce self-esteem (Chen and Bargh 1997; Shrum, Burroughs, and Rindfleisch 2005) and exhaust emotional and cognitive resources used to overcome such information. Ethnicity influences financial decisions, media use, and shopping behaviors (Briley and Aaker 2006; Bush, Smith, and Martin 1999). Teenagers exposed to negative portrayals

Figure 1. Conceptual Model



of their ethnic group (e.g., glamorized criminal behavior, poor academic performance) may perceive their group negatively (Ward 2004). Because ethnic group status is more salient when teens are a numerical minority (Grier and Deshpandé 2001; Jones 2002), it may heighten the effects of negative stereotypes on self-esteem.

Gender may also influence regulatory depletion. For example, female teenagers are frequently exposed to unrealistic media images (e.g., airbrushed models) that may affect their self-esteem. Moreover, adolescent girls experience body image dissatisfaction and depression after exposure to idealized body images, more so than older women (Durkin and Paxton 2002; Groesz, Levine, and Murnen 2002). Gender-specific effects produced by product advertisements may affect teen girls' spending behaviors. Such effects have been recognized by some regulatory actions; for example, the British Advertising Standards Agency has banned altered L'Oreal cosmetics advertisements that feature an airbrushed actress (Hall 2011). This type of action may encourage positive and realistic images instead of stereotyping so that teenagers use regulatory resources for financial decision making rather than to cope with negative information. Although female and ethnic teenagers may encounter stereotypes related to their cognitive abilities or other personal qualities (Steele and Aronson 1995), not all teenagers, ethnic minorities, or girls will be vulnerable to their negative effects (Ringold 1995) if they can find ways to overcome such stressors effectively.

### The Role of Familial Factors in Regulatory Depletion

Parental relationships may also influence lifestyle-based depletion (Baker, Gentry, and Rittenburg 2005). Family stability, parental relationships, and intrafamily communication are essential to teen consumer development (Carlson, Grossbart, and Stuenkel 1992). Parental involvement in teenagers' financial decision making produces more favorable outcomes (Palmer, Pinto, and Parente 2001). The quality of parental relationships may vary somewhat according to ethnicity. African American and Hispanic teens more often live in single-parent (mother-only) households (54% and 28%, respectively) than Caucasian teens (19%) (U.S. Census Bureau 2005–2009) and are more likely to lack relationships with two parents (Kung and Farrell 2000).

Weak family relationships can lead to depletion and a complex set of downstream behaviors. Family instability may contribute to insecurity or a reduced sense of control (Ackerman et al. 1999), resulting in coping behaviors such as compulsive buying (Roberts, Manolis, and Tanner 2003) and unexpected financial choices. For example, in Trinidad, black children were more likely than East Indian children to choose an immediate reward of \$1 over \$1.50 one day later (Mischel 1961); this effect disappeared when controlling for the father's trustworthiness. Thus, highly depleted teens may make choices that seem rational to them in their current situation, though these decisions may not be in their best *long-term* interests.

In summary, we investigate the role of lifestyle-based depletion on teenagers' ability to make decisions in their long-term interests. As lifestyle-based depletion increases,

teens may save less money or spend more on nonessential goods. We predict that teenagers experiencing higher levels of lifestyle-based depletion will make less advantageous financial decisions. The quality of financial decisions may be further hindered if highly depleted teens suffer from low self-esteem, experience pressures and stereotypes related to their ethnicity or gender, or lack healthy relationships with their parents. Thus:

H<sub>1</sub>: When teens' lifestyle-based depletion increases, the quality of their financial decision making decreases.

We present two studies to examine the factors that affect teens' saving and spending behaviors. In Study 1, we conduct a cross-cultural survey to examine whether teens' savings rates vary as a function of lifestyle-based depletion and whether gender moderates this effect. We also study the roles of self-esteem, ethnicity, and relationship with parents. In Study 2, we present actual teen experiences in a cross-cultural qualitative investigation. This study refines our conceptual model and describes lifestyle-based stressors that emerge from the data. We interpret the extent to which these experiences lead to lifestyle-based depletion and influence the teens' behaviors.

## Study 1

The purpose of Study 1 was to measure the effects of lifestyle-based depletion on teen financial decision making. From prior research, we expected to find a negative relationship between self-esteem and lifestyle-based depletion. We also expected ethnicity to moderate the relationship between self-esteem and lifestyle-based depletion; that is, self-esteem is negatively related to levels of lifestyle-based depletion, but this effect may be stronger when the person is an ethnic teen (vs. a Caucasian teen). We also consider whether parental relationships influence lifestyle-based depletion. Finally, we examine whether being a female heightens the negative effects of lifestyle-based depletion on financial decision-making quality. For example, teen girls may experience additional pressures because of unrealistic images in the media, and these images may directly influence their shopping and spending behaviors as they strive to reach these ideals.

### Sample and Procedure

We administered a survey to 121 students at a high school located in a major U.S. city. Participants had a median age of 16 years (range from 15 to 18 years); 61 were male; and 73 were Caucasian, 22 were Hispanic, 19 were African American, three were Native American, one was Asian, and two were "other"; one participant chose not to specify. For approximately 20 minutes during their English class period, the teens completed the online study in the school's computer lab. They were instructed that researchers wanted to learn more about their shopping and spending. We measured the teenagers' saving and spending behavior, lifestyle-based depletion, self-esteem, relationship with parents, and parental education level. All teens who received parental permission to participate were entered into a drawing to receive one of five \$25 gift cards.

## Measures

### *Lifestyle-Based Depletion*

We measured teenagers' lifestyle-based depletion due to the pressures in their lives. We used eight items from Reilly's (1982) role overload scale and developed four items. Our lifestyle-based depletion index comprised these 12 items ( $\alpha = .84$ ); all items were assessed on a five-point ("strongly disagree/strongly agree") scale (Table 1).

### *Self-Esteem, Gender, Ethnicity, and Parental Relationships*

We measured self-esteem using Rosenberg's (1989) ten-item scale (Cronbach's  $\alpha = .86$ ). Participants indicated their gender and ethnicity. Participants completed six items about closeness to parents, time spent together, and parents' personalities (Peterson and Zill 1986); four items related to decision making and parental strictness (Fuligni and Eccles 1993); and two items about discussions with parents about finances (Table 1). All measures were assessed on a five-point scale and were combined to form a parental relationships index (Cronbach's  $\alpha = .78$ ). We also included the education level of the mother and father as covariates in the model.

### *Quality of Financial Decision Making: Spending Versus Saving*

We operationalized quality of financial decision making in terms of teenagers' spending versus saving choices. To assess the extent to which teenagers were willing to spend versus save, we asked them to read the following scenario:

"Imagine you have a summer job with a good income. Please indicate how much you would spend and how much you would save." Participants allocated their summer income across spending and saving to total 100%. We predicted that savings rates would decline as lifestyle-based depletion increased.

## Findings

We ran a moderated mediation regression model to test our predictions. The model comprised self-esteem as the independent variable, lifestyle-based depletion as the mediator, and financial decision-making quality as the dependent variable. We included ethnicity as the moderator for the relationship between self-esteem and lifestyle-based depletion and gender as the moderator for the relationship between lifestyle-based depletion and financial decision-making quality.<sup>1</sup> We included relationship with parents and parents' education levels in the model as covariates (for descriptive statistics, see Table 2).

We followed a three-step moderated mediation method (Preacher, Rucker, and Hayes 2007). First, we tested for mediation (i.e., lifestyle-based depletion mediates the relationship between self-esteem and financial decision making) when the moderators (ethnicity and gender) were excluded from the full model. Using bootstrapping, we

<sup>1</sup>For ethnicity, we found no significant differences in responses across the African American, Hispanic, and Native American teen respondents, so we combined these ethnicities into a single ethnic minority group. We excluded from the analysis the four respondents who indicated their ethnicity as Asian or "other" or chose not to specify.

**Table 1. Study 1: Measurement**

Construct	Cronbach's $\alpha$	Source
<b>Lifestyle-Based Depletion</b>	.838	First eight items adapted from Reilly (1982)
I have more responsibilities than the typical teenager.		
Without my support, my family would be much worse off.		
I have to do things to help my family which I don't really have time for.		
There are too many demands on my time.		
I need more hours in the day to do all the things which are expected of me.		
I feel I have to do things in a rush in order to get everything done.		
I just can't find the energy in me to do all the things expected of me.		
I provide a great deal of support to my family.		
The extra demands from my family affect my ability to do well in school.		
The extra time I spend working affects my ability to get good grades.		
I have the energy to meet all my responsibilities. (R)		
I feel overwhelmed by the responsibilities I have in my life.		
<b>Relationship with Parents</b>	.784	Adapted from Fuligni and Eccles (1993); Peterson and Zill (1986)
How often do you take part in family decisions concerning yourself?		
My parents encourage me to give my ideas and opinions even if we might disagree.		
My parents want me to follow their directions even if I disagree with their reasons.		
I have to ask my parents' permission to do most things.		
My mother and I are close.		
My father and I are close.		
My mother and I often do things together.		
My father and I often do things together.		
I want to be like the kind of person my mother is.		
I want to be like the kind of person my father is.		
How often do you talk to your parent(s) about their financial situation?		
How often do you talk to your parent(s) about the importance of saving money?		



**Table 2. Study 1: Descriptive Statistics and Correlation Matrix**

	M (SD)	Self-Esteem (X)	Ethnicity (Moderator 1)	Lifestyle-Based Depletion (Mediator)	Gender (Moderator 2)	Savings Rate (Y)
Self-esteem (X)	3.81 (.75)	1				
Ethnicity (Moderator 1)	62.39% white	.076	1			
Lifestyle-based depletion (Mediator)	2.87 (.76)	-.238**	-.233*	1		
Gender (Moderator 2)	50.43% male	-.005	-.131	.052	1	
Savings rate (Y)	33.65 (22.31)	.183*	.114	-.240**	.008	1

\* $p < .05$ .\*\* $p < .01$  (two-tailed).

Notes: Pearson correlations.

found an indirect and significant effect, resulting in a 95% confidence interval (.08, 4.05), with 5000 resamples. Thus, lifestyle-based depletion mediated the relationship between self-esteem and financial decision making when no moderators were present.

Second, in the mediator variable model (effect of self-esteem on lifestyle-based depletion, moderated by ethnicity), we tested whether the moderation effect (i.e., self-esteem  $\times$  ethnicity interaction) significantly predicted the mediator (lifestyle-based depletion). The relationship between self-esteem and lifestyle-based depletion was significant; more important, the moderating effect of ethnicity was also significant (Table 3, Panel A). As self-esteem decreased, lifestyle-based depletion increased ( $B = -.49$ ,  $t = -2.95$ ,  $p < .005$ ). Furthermore, ethnicity moderated this effect; the self-esteem  $\times$  ethnicity interaction was significant ( $B = .49$ ,  $t = 2.37$ ,  $p < .05$ ), in support of moderated mediation. The ethnicity main effect was also significant ( $B = -2.19$ ,  $t = -2.74$ ,

$p < .01$ ); being an ethnic teen indicated higher levels of lifestyle-based depletion. Furthermore, the variable relationship with parents was marginally significant ( $B = -.15$ ,  $t = -1.88$ ,  $p = .06$ ). Finally, the education levels of the father ( $p > .35$ ) and mother ( $p > .13$ ) were nonsignificant covariates, presumably because the teenagers live in the same school district.

Third, in the full model with the moderators included, we examined whether the moderation effect (i.e., lifestyle-based depletion  $\times$  gender interaction) significantly predicted the dependent variable (financial decision-making quality). Ethnicity moderated the relationship between self-esteem and lifestyle-based depletion and gender moderated the relationship between lifestyle-based depletion and financial decision making (Table 3, Panel B). The interaction between lifestyle-based depletion and gender significantly predicted savings rate ( $B = -15.50$ ,  $t = -2.71$ ,  $p < .01$ ).

**Table 3. Study 1: Moderated Mediation Regression Results**

A: Mediator Variable Model (Mediator = Lifestyle-Based Depletion)				
	Coefficient	SE	t	p-Value
Constant	5.17	.69	7.45	.001
Self-esteem	-.49	.17	-2.95	.004*
Ethnicity	-2.19	.80	-2.74	.007*
Self-esteem $\times$ ethnicity interaction	.49	.21	2.37	.020*
Relationship with parents	-.15	.08	-1.88	.063
Education of father	-.05	.06	-.92	.360
Education of mother	.08	.05	1.52	.132
B: Dependent Variable Model (Dependent Variable = Savings Rate)				
	Coefficient	SE	t	p-Value
Constant	-10.01	28.75	-.35	.73
Self-esteem	6.25	5.36	1.17	.25
Ethnicity	5.67	25.50	.22	.82
Self-esteem $\times$ ethnicity moderation	-1.20	6.56	-.18	.86
Lifestyle-based depletion	2.47	4.04	.6101	.54
Gender	45.24	16.68	2.71	.01*
Lifestyle-based depletion $\times$ gender moderator	-15.50	5.71	-2.71	.01*
Relationship with parents	2.58	2.44	1.05	.29
Education of father	2.24	1.73	1.30	.20
Education of mother	-1.15	1.68	-.68	.49

.01), in support of moderated mediation; the gender main effect was also significant ( $B = 45.24, t = 2.71, p < .01$ ).

These results support our proposed moderated mediation model, such that lifestyle-based depletion mediates the relationship between self-esteem and financial decision-making quality. Ethnicity moderates the relationship between self-esteem and lifestyle-based depletion, and gender moderates the relationship between lifestyle-based depletion and financial decision-making quality.

## Discussion

Our findings provide preliminary support for and offer new insights into why some teenaged consumer segments have low savings levels. The results also show that teens with lower lifestyle-based depletion levels tend to make choices with longer-term benefits, as reflected in their desire to save money. Self-esteem significantly affects the extent to which teens experience lifestyle-based depletion; as self-esteem decreases, lifestyle-based depletion increases. Ethnicity moderates this relationship, such that being an ethnic teenager increases the magnitude of the effect of self-esteem on lifestyle-based depletion. These results are consistent with research that suggests that ethnic minorities experience stress in coping with ethnicity-related pressures (Williams, Neighbors, and Jackson 2003). Moreover, gender significantly moderated the effect of lifestyle-based depletion on savings rate. This finding is consistent with research that shows that teenage girls may be burdened by unrealistic media images, which may distort their shopping and saving choices. Relationship with parents emerged as a marginal covariate; we examine this further in Study 2.

## Study 2

The purpose of Study 2 was to learn about teenagers' actual experiences related to spending and saving money. We conducted depth interviews to further explore the factors that may contribute to lifestyle-based depletion, including self-esteem, stereotypes, ethnicity, gender, and parental relationships, and their effect on teenagers' financial decision-making quality. We interpreted the experiences of African American, Caucasian, and Hispanic teenagers, and we present insights into their lives and decision-making processes that emerged from their stories.

## Sample and Procedure

We conducted depth interviews with 26 teenagers with a median age of 15 years (range from 13 to 18 years); of these, 13 were African American, 7 were Caucasian, and 6 were Hispanic. Furthermore, 19 were female (Table 4). The ethnic teen participants represent the two largest minority groups in the United States (15% Hispanic and 12% African American; U.S. Census Bureau 2005–2009) that are heavily concentrated in the adolescent age range: That is, 14% of African Americans and 16% of Hispanics, compared with 10% of Caucasians, are between ages 10 and 17 (U.S. Census Bureau 2005–2009). The Hispanic and African American participants were recruited from a youth church group for predominantly ethnic minorities and from a school program for ethnic minorities, both of which were located in a major U.S. city. The Caucasian participants were recruited

**Table 4.** Study 2: Participant Demographics

Participant <sup>a</sup>	Gender	Ethnicity	Age
<b>Lower Levels of Lifestyle-Based Depletion</b>			
Alma	F	Hispanic	13
April	F	African American	14
Derek	M	African American	13
Debbie	F	African American	14
Elaine	F	African American	18
Ingrid	F	Hispanic	14
Nathan	M	African American	13
Pamela	F	African American	14
Arturo	M	Hispanic	18
Todd	M	Caucasian	17
Brian	M	Caucasian	17
Heather	F	Caucasian	16
Mark	M	Caucasian	16
<b>Higher Levels of Lifestyle-Based Depletion</b>			
Cynthia	F	Hispanic	15
Catherine	F	Hispanic	13
Ellen	F	African American	16
Nakita	F	African American	13
Stephanie	F	African American	15
Tomika	F	African American	13
Lourdes	F	Hispanic	14
Yvonne	F	African American	17
Whitney	F	African American	14
Anthony	M	African American	14
Christine	F	Caucasian	17
Ashley	F	Caucasian	17
Courtney	F	Caucasian	16

<sup>a</sup>Names have been altered to protect the identity of the teen participants.

from a youth church group. Interviews took place on-site either at the community church or immediately following the class. Teen participants volunteered for the study with permission from their parents or guardians.

Each one-on-one interview was tape-recorded and lasted approximately one hour. Because same-race interviewers may help solicit richer responses (Webster 1996), interviewers were members of the teens' ethnic groups (i.e., African American, Caucasian, and Hispanic). Each interview was initiated with a brief overview of the study, followed by a series of demographic questions (e.g., age, year in school). The interviews began with open-ended questions about the teens' families (e.g., "Tell me about yourself and your family," "Where did you grow up?"). The interviewers asked the teens if they have role models or people they look up to (either people they know personally or famous people) and whether these role models influence their shopping preferences. The teens shared stories about their shopping behavior and typical shopping companions, favorite stores, preferred brands, and whether they or someone else makes the shopping decisions (e.g., how much to spend, what to buy). Next, the interviewer asked questions related to the teens' family financial situation, such as their parents' spending behavior and their comfort level with their financial future. The teens described their saving and spending patterns, for example, when they receive money now or

anticipated receiving money in the future. Each interviewer also asked: “What if you receive \$100 this week, but you are not sure if you will receive another \$100 next week? What would you do with the money?” Finally, each interviewer asked participants about their family background, if their current situation was better or worse than that of their grandparents and parents, their source of income, and their saving habits. Participants were thanked and given a \$10 gift card.

## Data Analysis

We used Nvivo 8, a qualitative data analysis software, to assist in the initial coding of the interview transcripts. We followed a hermeneutic approach (Thompson 1997) to analyze the responses. This approach enabled us to uncover the meanings behind the teens’ experiences. The teens’ interpretations of their experiences reflect their unique perspectives on spending and saving. Consistent with hermeneutic procedures, we first performed an intratextual analysis of each participant’s responses and identified initial categories and themes. We conducted part-to-whole readings of each set of responses and focused on patterns of similarities and differences across all participants. Several internal factors emerged from the data, such as self-esteem, stereotypes, and family relationships. We extrapolated instances when the presence or absence of these factors affected the likelihood of consumption behaviors. We discussed interpretations of the participants’ text, identified areas of agreement, and resolved any disagreements. After reaching consensus on the key themes and categories, we coded all the responses.

## Findings

We structure our findings around the types of lifestyle-based stressors the teens experienced. Four partly inter-related stressors emerged from the data: (1) self-esteem and stereotypes, (2) ethnicity, (3) gender, and (4) family relationships and personal finances. These stressors seem related to participants’ lifestyle-based depletion and downstream financial decision making (Table 5). Although public policies and financial literacy programs intended to edu-

cate teens on financial decision making exist (e.g., Jump\$tart), we find that for some teens, these programs may not be sufficient. Such policies and programs may benefit from emphasizing behavioral elements that build on these stressors, such as how to apply cooling techniques for spending.

In the following sections, the teens describe factors such as stereotypes or family relationships that may contribute to lifestyle-based depletion. We assess whether high levels of lifestyle-based depletion lead to more short-term decision making (e.g., overspending) and whether low levels of lifestyle-based depletion lead to more long-term decision making (e.g., saving more).

### Teens with High Levels of Lifestyle-Based Depletion

Several contributing factors to high lifestyle-based depletion levels emerged from the interviews: low self-esteem and negative stereotypes (racial or gender), negativity experienced from ethnic group status, limited parental relationships, and uncertainty about their financial future. Teens with high levels of lifestyle-based depletion seem to have more demands on their time and energy and have less self-regulatory resources to make high-quality consumer decisions. Of the 26 participants, we identified 13 teens who demonstrated higher lifestyle-based depletion levels. These teens were equally represented across the high school and church-based participants. The average age of the highly depleted teens was 15 years (Table 4).

*Self-esteem and stereotypes.* Many of the teens described negative gender or ethnic stereotypes. Some ethnic teenagers lack role models who can help them navigate through consumer and financial decision making, and therefore they rely on other informal sources, even celebrities, for consumption guidance (Perry and Ards 2002). We found that teens with higher depletion levels had greater exposure to negative stereotypes, less access to positive role models, or lower self-esteem. Exposure to unrealistic role models presented in the media may glamorize shopping for nonessential goods for some teens. For Lourdes (Hispanic female, age 14), low self-esteem and unrealistic female role models seemed to influence her spending behavior. She dis-

**Table 5. Study 2: Comparison Lifestyle-Based Depletion Levels**

	Higher Level of Lifestyle-Based Depletion	Lower Level of Lifestyle-Based Depletion
Self-esteem and stereotypes	High levels of exposure to negative stereotypes, with a negative impact on teen and low levels of self-esteem.	Medium/high levels of exposure to negative stereotypes, with minimal/moderate impact on teen and high levels of self-esteem.
Ethnicity	Ethnicity is perceived as relatively negative.	Ethnicity is perceived as relatively positive.
Gender	Unrealistic media images that are tied to shopping behavior (e.g., models). Additional gender-based responsibilities.	Positive gender-congruent role models (e.g., female teens with positive female role models, such as mother or teacher).
Relationship with parents and family finances	Poorer relationship with parents and instable home. False or poorer understanding of family finances and more uncertainty about financial future.	Better relationship with parents and stable home. More accurate and better understanding of family finances and less uncertainty about financial future.
Effect on consumer financial decision-making quality	More likely to overspend and save less money.	More likely to spend wisely and save more money.

cussed having few friends and mostly shopping with her mother, a single parent. Her mother and media images tend to be the primary shopping influencers. When asked whom she would most want to be like and whether she buys items to be like that person, Lourdes explained that Victoria's Secret models were her aspirational group:

I really look up to models. They always wear really elegant, sexy outfits. That's what I want to be like, like in my 20s, I want to wear Guess or Nordstrom.

Lourdes demonstrated strong tendencies toward overspending and struggled with the idea of spending within a budget. As part of the interview, teens were asked "What if you were given \$100 today?" and then were given various scenarios about the probability of receiving another \$100 in the future. For Lourdes, the money represented an opportunity to buy an expensive product, even if that meant asking her mother for additional money.

Interviewer: What if you receive \$100 this week, but you are not sure if you will receive another \$100 next week?

Lourdes: So, it would be really hard. I don't know what I would do because I feel, because there might be other things that I like that's \$100 that I can afford might be gone next week. So it depends if I like something better, but it's like \$180 or something. I don't know. I'd probably ask my mom for another \$100 extra money. She might deny it, but I'd try really hard to convince her so she'd give me \$100.

Interviewer: Would you save any of it?

Lourdes: Probably not, no.

Lourdes did not question her mother's actions (i.e., overspending is acceptable) or the glamour of her aspirational group. She wears makeup because she "definitely look[s] ugly without it" and does not aspire to attend college ("I don't think I'm smart enough"). Lourdes's self-proclaimed low self-esteem revealed a highly depleted teen with a short-term financial perspective. She is not receiving basic financial skills from her mother and relies heavily on external sources for information. Personal finance courses may help teens like Lourdes create their own savings goals and gain an understanding of the specific behaviors necessary for goal achievement. Teens who are empowered to make their own financial decisions may be able to adopt a more long-term financial perspective and experience more positive self-esteem.

*Ethnicity and gender.* Similar to Lourdes's experiences, other female teenagers described shopping and spending behaviors that are influenced by a desire to keep up with unrealistic aspirational media images. Moreover, while all teen respondents discussed the role of ethnicity in their lives, how they interpreted the impact of their ethnicity on their present and future behavior differed across ethnicities; some ethnic teens struggled with overcoming negative racial stereotypes. Some ethnic minorities may lack access to as much cultural capital as their nonethnic counterparts, which can affect their ability to navigate consumer decisions (Lee, Ozanne, and Hill 1999) and increase stress. For example, African Americans and Hispanics describe being more stressed about money and family pressures than Caucasians (APA 2009). Several of the ethnic teens in our study

also believed that their nonethnic peers enjoyed a better lifestyle. Our data also reveal that highly depleted teens perceived a connection between their ethnicity and the instability of their future. Anthony (African American male, age 14) described his feelings of uncertainty about his future, mainly because of his ethnicity:

I would probably say Caucasians would [be better off] 'cause right now most of their race has the most money, but I don't know, 'cause maybe five years from now Hispanics, Chinese, Japanese, gets that level and maybe come over, so ... uncertain [future]? Yes.

Anthony later described spending money on brands that represent his ethnic group status and had little knowledge about the importance of saving money. Negative experiences related to ethnicity can contribute to high levels of stress (Williams, Neighbors, and Jackson 2003), such as pressure to conform to ethnic stereotypes (e.g., gangs). Intervention programs emphasizing the malleability of racial or gender stereotypes (Aronson, Fried, and Good 2002) could help reduce depletion levels and complement financial literacy education. Financial literacy programs should also incorporate positive ethnic and female role models demonstrating responsible spending behavior (e.g., Forehand and Deshpandé 2001).

*Poor relationship with parents and family instability.* Family relationships, particularly the relationship with the father, influence the development of consumer behavior (Bush, Smith, and Martin 1999). Ethnic minorities are faced with higher rates of childbirth out of wedlock, divorce, and incarceration (Ruggles 1997), which may be reflected in greater family instability for ethnic teens. Several of the highly depleted teens described limited or no relationships with their fathers. Lourdes shared that she has no contact with her father and that her mother overspends:

It's hard to explain my dad. I saw my dad when I was about 8 or 9 years old, something like that and stopped seeing him. He was really, really, really, like nasty-like, and I just stopped seeing him.

She [mother] goes over limit a lot. She would be like, this is the limit, blah, blah, blah, and I'd be like "OK." And then I usually like 1 or 2 more things and then she [says], "OK, fine, we'll go over the limit this time, only this time," but it's always the same.

Lourdes says she is uncomfortable with her family's financial future and does not feel that her own financial future is in her control.

I think it's gonna be a little shaky [financial future of her family]. I mean it's a little shaky now, I think it's gonna remain that way for a while.... I am not comfortable [regarding her own financial future]. I think it's gonna be difficult because I am gonna have to buy everything, my car. I am gonna have to buy a cell phone,... and it'll be hard to go buy clothes and makeup when I want.... I know it's gonna be a lot harder.

Similar to Lourdes, some teens described an unstable family situation with little to no communication with their fathers. Because ethnic teens are more likely to live in single-parent households (U.S. Census Bureau 2005–2009),



they may experience higher levels of stress at home. Although a preference for short-term financial decision making seems irrational, for teens like Lourdes, who perceive their future as uncertain, this behavior may seem rational given their situation. Community-based organizations that provide financial education programs should target both parents and their teens. Such programs could encourage families to discuss household finances to help reduce teens' anxiety and uncertainty about their future.

*Family and personal finances.* Some teens may experience higher levels of lifestyle-based depletion because of household pressures. For example, Whitney (African American female, age 14) shared instances of overspending and little understanding of her own finances. She described her mother's financial situation as "kind of good sometimes and bad sometimes," and when asked about her single mother, she said, "She's like my mom and my dad." Whitney interprets her family's financial instability and the single-parent responsibilities of her mother as typical relative to other teenagers. Whitney expressed a lack of exposure to and understanding of strategic financial decision making. It was not uncommon that highly depleted teens were contributing to their household expenses. Whitney described the financial stress her family faces:

I'm gonna give money to my family ... when I'm getting older and I'll give money to the family but my grandma's financial situation ... it's kind of bad sometimes, and then my mom, she doesn't get child support and like she makes money and she has to pay bills and gas and all that stuff. Her [financial situation is] kind of good sometimes and bad sometimes, so like that's how my whole family is, except for my aunt Alice 'cause she's unemployed and didn't even save enough money to be retired and like a house and stuff, so her financial situation isn't very well.

For Whitney, the practice of living paycheck to paycheck or requiring multiple family members to contribute to household bills negates the ability to save money or perhaps make rational purchase decisions. For some teens, the burden of paying household bills contributes to higher stress levels and lifestyle-based depletion, especially for females (Larson and Verma 1999).

Christine (Caucasian female, age 17) described financial pressures at home. Because her parents cannot give her extra money, Christine works part-time at a fast-food restaurant. As are other teens, Christine is heavily influenced by the behaviors of others in her social environment (Bearden and Etzel 1982). She looks to her fast-food manager for guidance:

The people I work with at [fast-food restaurant], my managers, they all started pretty young and they worked their way up really fast, and they give me good business pointers and I'm really close with my manager and he's my role model, so we discuss that aspect.

Christine seems to be experiencing higher levels of lifestyle-based depletion as a result of the stress of managing the demands from a part-time job to offset financial constraints at home, her schoolwork, and additional chores at home. Being a female teen, coupled with higher levels of lifestyle-based depletion, may influence her spending deci-

sions. For example, Christine is influenced by aspirational role models, such as actress Scarlett Johansson. When she shops for clothing, she looks for the sale racks at Forever 21, where she tries to emulate the actress through her shopping behavior:

Scarlett Johansson, so all pretty inside and out. She always has something so killer and she is so gorgeous. Obviously, if I see a cute dress that she wears in a magazine then I'll try to go find something like that, that's similar. Because we have the same body type too, so if something looks good on her then it'll look good on me too. She wears probably more tight-fitting dresses that show her curves. And I like that, but they're not like too revealing to the point where my mom would be like, "No, you shouldn't be wearing that."

The additional pressures from her part-time job and media influences may also contribute to her financial decision-making quality, such as saving money. When Christine was asked how she might spend \$100, she said she would spend most of it on clothes, without any consideration to savings. Christine is focused on short-term opportunities:

Christine: I'd probably blow it more on random things that I wanted. Like go shopping, and probably take my friends out to lunch.

Interviewer: Would you save any of it?

Christine: Yeah, that would be good [laughs], but I probably wouldn't. I would probably think that for 2 seconds and be like, yeah you really should save that, but nah, probably not.

Christine seeks to emulate the behaviors of her role models (e.g., fast-food manager, celebrities), which puts her at a disadvantage relative to her less depleted peers. Teens with added pressure from part-time jobs and other financial responsibilities may be more vulnerable to media images, such as celebrities and models, which may influence their financial decisions. In addition, teens with a false or an inaccurate understanding of their personal or family finances seemed uncertain about their future. The added stress seemingly affected their current and potential spending behavior.

### ***Teens with Low Levels of Lifestyle-Based Depletion***

Although many teens experience challenges in their homes and social settings, some teens display a relatively more sophisticated understanding of racial and gender stereotyping and its impact, higher levels of self-esteem, and a relationship with two parents. Although these teens may encounter stressors, they tend to put them in perspective and cope by having a more optimistic future outlook. They are less likely to internalize the negative surrounding influencers or to feel overwhelmed by role stress. Teens with lower lifestyle-based depletion levels benefit from greater exposure to positive role models and more sophisticated understanding of their finances. A highly self-regulated consumption pattern emerged among these teens. We categorized 13 participants as having lower levels of lifestyle-based depletion (Table 4).

*Self-esteem and stereotypes.* Negative stereotypes are not depleting factors for all teens. Some ethnic and female teens acknowledged stereotypes but exhibited higher self-esteem

and strong group identity that helped them maintain rational consumption behavior. Higher self-esteem can help buffer against stressful life situations (Orth, Robins, and Meier 2009). Alma (Hispanic female, age 13) exhibited positive behavior possibly because of higher self-esteem. She described how schoolmates perceive Hispanics:

People tend to think that all Hispanics are poor, but that's not necessarily true. Especially our school has a wide range of people. So, they would probably think that [Hispanics are poor]; people jump to conclusions a lot.

Alma noted that if a Hispanic teenager wore an expensive clothing brand to school that "some would probably say they stole it." When asked about wearing brands to signal her identity, Alma said, "I like what I wear but I don't really care what people think about what I wear." Alma identified negative racial and gender stereotypes in her social environment but was able to overcome them. She described a sense of pride because her school principal was a Hispanic woman. The negative stereotypes did not seem to contribute to lifestyle-based depletion for Alma, perhaps because she was exposed to positive role models (e.g., Hispanic female principal) and was better able to self-regulate and pursue long-term-focused behavior.

*Ethnicity and gender.* Ethnic teens are aware of their ethnic group status; however, some teens are able to overcome negative ethnic stereotypes. Teens with lower levels of lifestyle-based depletion also exhibited less stress and negativity about their ethnicity or gender and were more optimistic about their future. For example, Elaine (African American female, age 18) seemed to embrace her ethnic heritage and was optimistic about her future:

Our society is kind of growing a little more, and we are more accepting of a little bit more. The financial thing comes from a job, and how great of a job you get, and I mean I hope I get a good job, but it might set me back because I am an African American woman or whatever, but, if it does, it would kind of make me try harder so its probably a little bit more work, but it's not that bad.

Elaine has been exposed to more positive images of African American women and is relatively optimistic about her future. Some teens, including Elaine, believe that their ethnicity or gender are not a hindrance to securing future employment, and thus their stress levels tend to be lower.

In addition, some Caucasian teens are sensitive to, but not fully aware of, the impact of ethnicity on their ethnic counterparts. For example, participants were asked about whether ethnicity matters for a better future. Mark (Caucasian male, age 16) shared his perspective on ethnicity:

I think, uh, that the future can only be more accepting more towards people, 'cause you can see that with MTV, like, race pretty much doesn't matter at all. It's all different kinds of people on there. That shows that people are accepting. Like, we're all about incorporating everybody now, so you know, it's better. But, you know, one of my really good friends, he's Asian. He was trying to find a job and it was kind of hard for him, he couldn't get anything. But we don't know if it is 'cause he was Asian or something.

Mark is comfortable with his ethnicity. From his perspective, ethnicity may be more significant for others, such as his Asian friend struggling to find a job.

*Good relationship with parents and family stability.* Teen respondents who described positive parental relationships and a more stable home also displayed lower levels of lifestyle-based depletion. These teens less often experienced the burden of paying household bills or raising siblings. Alma described her relationship with her parents, emphasizing that she is close to both her parents, though they are divorced. Despite her parents' financial ups and downs, Alma feels in control of her financial future. She mentioned a recent experience when she had to move from a house to an apartment and change schools because of unexpected financial instability. Nonetheless, Alma was optimistic about the future:

We had [to] move which was like a big deal, because our relatives lived in [small town] and we had a huge house, and then now, we live in a little apartment and we have a new school and I think that impacts a lot. But I think I'll have more chance to succeed like now, because I am closer to [large city]. I can go to internship, like if I live in [small town], it's a two hours' drive. So I can't do that kind of stuff. So that just kind of works.

In addition, Alma described her parents' financial and job situation:

Just recently, my mom got like a raise and she didn't really tell us, but I kind of found out and my dad was laid off for like almost a year and a half and he just started to work for four months, just recently, then he got laid off again. It's kind of not really stable, but he also does landscaping which is his own thing. He always has that year round. So, uh, and my mom also has a stable job. I think we'll get through it.

Alma seemed to have a good understanding of her parents' financial situation. She was realistic about her future and understood the consequences of unemployment. Some of the respondents, including Alma, revealed a greater ability to anticipate consequences of their behavior. When asked if she has control over her future, Alma said, "I think that if I do good in school, then I can get to a good college and I can get a good job." We later observed that these experiences shaped her shopping behavior and financial literacy:

Alma: I like shopping but I am not like a shopaholic. I am not like obsessed with it.

Interviewer: What if you receive \$100 this week, but you are not sure if you will receive another \$100 next week?

Alma: I'll spend half and save the other half, for the next week.

Interviewer: What if you were sure you would receive another \$100 next week?

Alma: I would probably buy like a really nice jacket or a really cool pair of shoes that would last for like a long time and I wouldn't wear a lot so I want to keep it nice.

Although Alma is surrounded by potentially resource-depleting factors, she continues to demonstrate a long-term orientation to financial behavior (i.e., saving money). Alma has a good relationship with both parents, a relatively sophisticated understanding of racial stereotypes, high self-esteem, and low financial demands from her family. She thus seems to have a low lifestyle-based depletion level. Regular

discussions with her parents about their finances also seem to contribute to her long-term financial perspective.

Some male teens with lower levels of lifestyle-based depletion also described strong relationships with both parents. Brian (Caucasian male, age 17) acknowledged that he was not very stressed; he thinks his father is proud of him because he tries to get good grades:

I've never gotten too stressed out with like classes, yeah, like, it is kind of a lot with [football] practice, but I like that more than having way too much free time, I like being busy, like having something to do.

Brian has a strong relationship with his father, which also contributes to lower stress levels related to his home situation:

My dad is like, I'm pretty sure he's proud of me, so if I really, really wanted something, he would get it. If I was dying to have it, he would get it for me. He wouldn't mind 'cause he'd know I really want it 'cause I don't usually ask too often.

Brian is cautious about spending. He would not want to ask his dad to buy him expensive shoes:

I like my Under Armour shoes; I've had these ones for like two years. I wore them out 'til they're just dead. They cost like \$80, even if I loved a \$200 pair of Nikes no way would I ask my dad to buy 'em, 'cause money's a little tight and if, like by some accident, they somehow got ruined, I would feel bad.

Teens with lower levels of lifestyle-based depletion also perceived themselves as having more control over their lives and having more optimistic views of their future. Stable homes contribute to a teen's perception of greater self-control (Ackerman et al. 1999). When describing his future, Brian said that he felt almost 100% in control:

I mean there's that slight chance of fate that something could go wrong or something like that, but for the most part, I feel like I'm very much in control.

Teens with lower levels of lifestyle-based depletion also seemed to reflect on their choices more carefully. When asked how he might spend \$100, Brian reported that he would save a portion of the money first (a practice he learned from his parents and grandparents) and then spend some to benefit friends or family, followed by spending some for himself. Both Brian and Alma offered a long-term financial perspective, partially due to better communication with their parents about spending and saving money.

*Family and personal finances.* Teens with lower levels of lifestyle-based depletion are less burdened by household financial obligations. For example, some teens described higher levels of control over their finances and future, which may positively influence future behavior (Perry and Morris 2005). Heather (Caucasian female, age 16) comes from a working-class family and described her family's way of saving money, a system inspired by her father. She explained that her father keeps jars for extra money and that her mother and siblings practice the same savings behavior. For example, there is a savings jar, a charity jar, and a spending-money jar, and family members contribute part of their income to each jar.

If Heather wants to go out with friends, she must withdraw money from the spending-money jar. Unlike some of

the highly depleted teens who described their parents' practice of hiding money under a mattress, Heather explained that the charity-jar money was designated for their church. When asked what she would do if she were given \$100 today, Heather said she would save it all. If she knew she was receiving another \$100 next week, she would save most of it. Heather is a member of a lower-income household, but her family has taught her some financial management basics.

Heather: Buy something extra that I don't need or buy a cute top or something, spend a little of it but not all of it.

Interviewer: How much would you spend on the cute top?

Heather: Probably like \$20.

Interviewer: What would you do with the rest?

Heather: Just save it, savings jar.

Heather also reflected lower levels of materialism. Heather believes that the brands of clothing she wears signal her frugality (and she is comfortable with that perception). If she finds clothing on sale that "has potential," she will sew alterations to make the clothes more fashionable:

I just like seeing different possibilities, like my mom always gives me a hard time 'cause I'll buy something, like I'll find a dress and with a few little alterations I can make something I like. And my mom sews so I take her something and tell her what I want done and she can make it and I like it.

Heather's more sophisticated understanding of her personal finances reflects the importance of family communication about money. Although the act of dividing up money into the separate jars may seem trivial, Heather is actually learning how to carefully allocate her funds. Together with her parents, Heather demonstrates behaviors similar to the cooling-off technique (Metcalf and Mischel 1999) because she does not immediately spend her money. Such careful fund allocation and delayed spending behavior may lead to superior long-term financial behaviors.

## Discussion

Study 2 offers anecdotal evidence that lifestyle-based depletion contributes to teen decision-making and consumption behavior. Teens have a diverse set of experiences; some teens do not seem able to handle their day-to-day responsibilities. Teens with higher levels of lifestyle-based depletion tend to have lower self-esteem, poor relationships with one or both of their parents, and relatively higher levels of responsibility (e.g., holding part-time jobs, paying family bills). These teens tend to attribute their pessimism about their futures to their ethnicity or gender, often because of negative stereotypes or unrealistic role models (e.g., celebrities).

Highly depleted teens express feeling overwhelmed and therefore have fewer regulatory resources to devote to decision making (e.g., spending versus saving decisions). They may be more susceptible to media influences, which affect their spending behavior. Our findings suggest that there is a need to encourage training on how to cope with negative stereotypes. Because some teens are less likely to talk to their parents about long-term financial planning, community-based consumer education programs should be offered to



teens and their parents, and school-based programs should account for basic financial skills not learned at home.

Conversely, teens with lower lifestyle-based depletion levels tend to resist negative influencers, to report good parental relationships, and to feel optimistic about their future. This mind-set seems to be driven by higher self-esteem and an ability to overcome negative racial or gender stereotypes. Such teens describe greater exposure to positive and realistic role models and better discipline in spending their money (e.g., spending jars) with a long-term perspective. These teens are more likely to emulate their parents' behavior (e.g., save money) or purchase after consulting with their parents. They seem to manage the demands of their various roles and to experience less stress. Less depleted teens are also less likely to express feeling burdened by household pressures, such as paying bills, raising younger siblings, or facing harmful influences (e.g., gangs). They possess sufficient resources to make long-term decisions.

## General Discussion

This research contributes to the literature on self-control, consumer financial decision making, and transformative consumer research. Building on the resource depletion model (Baumeister et al. 1998), we introduce the concept of lifestyle-based depletion. Our studies demonstrate that some teens experiencing lifestyle-based depletion may make poorer quality financial decisions, such as saving less money. Our findings are consistent with research that suggests that depleted consumers are more likely to make less-than-optimal financial choices (e.g., retirement plan choices) (Howlett, Kees, and Kemp 2008). Although prior work has examined the influence of external factors on teen behavior or negative experiences for ethnic consumers (Crockett, Grier, and Williams 2003; Harris, Henderson, and Williams 2005), we examine how teens incorporate social and family demands into their financial decision making. Our results suggest that teens can overcome depleting factors and learn to make better long-term choices.

## Theoretical Insights

This research provides new theoretical insights into the factors that influence whether a teen can overcome lifestyle-based depletion to make better long-term financial decisions. Several factors that influence teen consumers' levels of lifestyle-based depletion emerged. Teens with higher self-esteem levels are able to safeguard against stressful life circumstances (Orth, Robins, and Meier 2009); they tend to feel more confident about their futures. In contrast, teens with lower self-esteem may be more vulnerable to unrealistic media images. Ethnicity is also related to a teen's level of lifestyle-based depletion; ethnic teens discussed the added pressure of coping with stereotypes (e.g., Alma stated that if a Hispanic student wore nice clothing to school, other students would assume that it was stolen).

Teen girls more often described added responsibility as caregivers of family members. Female teenagers also experience stress from unrealistic media images, which can affect their shopping and spending choices. Female teens may purchase clothing, cosmetics, or entertainment to emu-

late aspirational reference groups. Finally, parental relationships seem to affect teen consumer behavior (e.g., Brian believes that his father is proud of him). Teens who have relationships with both parents (even if the parents live apart) tend to feel more in control of their future and take a longer-term view of their consumer and financial choices than teens without such parental relationships.

## Public Policy Implications

Most people incur some level of debt (e.g., car loans), and if carefully managed, doing so can promote creditworthiness. However, extreme overspending can lead to onerous levels of debt and contribute to a broader societal financial burden. Understanding how consumption behaviors are shaped in the teen years can provide insights into how to improve the trajectory of teenagers' financial futures. Our findings uncover factors that may help highly depleted teens evolve into consumers with positive and sustainable financial behavior. We offer policy recommendations to promote improved financial decision-making quality through financial education in school- and community-based contexts, and we recognize families as an important source of financial information for teenagers.

## School-Based Interventions

The majority of states (37) do not include a personal finance course as part of their required high school curriculum, including several states with large ethnic minority populations and high unemployment rates (Council for Economic Education 2012; U.S. Department of Labor, Bureau of Labor Statistics). Students from states requiring a personal finance course reported greater financial knowledge and displayed positive financial behaviors (e.g., increased savings, less compulsive buying, responsible credit card use) (Gutter, Copur, and Garrison 2010). Compared with Caucasians, African Americans are almost twice as likely and Hispanics are more than three times as likely to drop out of high school (U.S. Department of Education, National Center for Education Statistics 2011). Thus, it is critical that state education policy makers require financial literacy standards *before* high school (i.e., K–8), especially for schools with high ethnic minority populations. We call on states to require that high schools, at a minimum, offer a personal finance course. Online programs may also help parents and teachers educate children on responsible financial behavior, such as creating savings goals, in a fun game environment. For example, *themint.org* (sponsored by Northwestern Mutual and the National Council on Economic Education) and *mysavingsquest.com* (sponsored by Wells Fargo) offer “edutainment” tools for helping develop financial skills.

Our data reveal that unrealistic role models or negative stereotypes can be detrimental to teens' spending behavior. Financial literacy education should incorporate more positive ethnic and gender role models who demonstrate responsible financial behavior (Forehand and Deshpandé 2001). Teen intervention programs emphasizing the malleability of stereotypes (Aronson, Fried, and Good 2002) may also help reduce teens' depletion levels and enable them to focus on longer-term financial goals. Less than



20% of teachers feel sufficiently prepared to educate their students about personal finance (Way and Holden 2006). Thus, we recommend that state education policy makers ensure that K–12 teachers receive adequate training on personal finance education, while taking into account potentially depleting stressors that can affect teen financial decision making.

### Community-Based Interventions

Nonprofit organizations, community centers, and local churches can be valuable resources for expanding the availability of financial education to families. For example, the church through which we recruited a portion of our teen respondents included families with low financial literacy. Nonprofits, such as Operation Hope ([www.operationhope.org](http://www.operationhope.org)), offer financial education through local volunteers to children in low-income communities. The United Way ([www.unitedway.org](http://www.unitedway.org)) partners with local organizations to promote financial stability, such as increasing financial management skills, for low-income families. We encourage more federal funding and increased involvement from corporations and private donors to support such programs that target low-income and ethnic communities.

### Family

Better relationships and increased communication with parents about finances help promote a long-term financial perspective. Our data reveal that teens may rely on their parents for financial information, but some parents are not equipped with sufficient money management skills. We recommend more consumer education programs that include parents and their children to improve the family dialogue about finances. Parents can take a more active role in educating their children, as well as help reduce the pressure on teens to develop these skills on their own. For low-income families receiving social services, we encourage such programs to include a financial literacy component. Parents and teens may also benefit from practicing cooling techniques (Metcalf and Mischel 1999) related to spending, such that they would have the opportunity to “cool off” and reassess their options before making a decision. For larger purchases, requiring waiting periods or parental consent or providing flexible return policies (e.g., longer time periods) for impulse purchases can help teens make better long-term decisions.

### Limitations and Further Research

Our findings highlight the opportunity to understand and prevent the causes of overspending and burdensome debt accumulation. The ethnic teens in our studies lived in areas in which they are in the numerical minority; thus, researchers should consider including teens living in areas in which they are in the numerical majority (e.g., San Antonio, Tex.). We also did not collect family household income, because most teens did not have access to these data; such data could be incorporated into future studies. Other factors may contribute to lifestyle-based depletion, such as the treatment teens perceive in a shopping context; for example, in Study 2 a teen discussed the perception that there are “white people stores” and “black people stores.”

Highly depleted teens may anchor on bad information when making financial choices, such as saving and spending. For example, exposure to parents using payday loans in lieu of traditional banks may contribute to acceptance of higher rates and lower savings levels. Further research could examine whether lifestyle-based depletion influences the types of information teens use as anchors when making financial decisions.

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