

# Imagined interactions, family money management patterns and coalitions, and attitudes toward money and credit

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**Abstract** This study explores the imagined interactions college students have with their parents about money and credit, their attitudes toward credit and money, the ways they say their parents deal with financial decisions, and the communication coalitions regarding finances they perceive existing within their family. Students' imagined interaction pleasantness is greatest when parents jointly form a plan for paying off credit card debt and lowest when parents argue. When family coalitions exist, students report more frequent imagined interactions. Imagined interaction frequency and pleasantness are related to credit and money attitudes.

**Keywords** Credit cards · Family differentiation · Imagined interactions · Money management patterns · Parent–teen communication

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## Introduction

Adolescents have large disposable incomes, spending over \$141 billion annually (Teenage Research Unlimited, 1998). However, older adolescents (15–17 years old) have limited financial knowledge (JumpStart Coalition, 1997, 2000), worry about not having enough money (Zollo, 1999), and desire information about how to save money for major goals and how to get credit (Varcoe, Peterson, Garrett, & Martin, 2001). Meanwhile, credit has been linked to multiple problems in the college student population including anxiety, dropping out of school, working multiple jobs, suicide, and filing for bankruptcy (Mannix, 1999; McMurtrie, 1999). In addition, financial issues often are sources of conflict within a family (Olson et al., 1983; Picard & Fullmer, 1999). Given the salience and problematic nature of financial issues, it is likely that college students will invest mental time and effort exploring these issues using a cognitive process known as imagined interaction.

Imagined interaction refers to a mindful process (Honeycutt, 1991) “whereby actors imagine themselves in interaction with others” (Edwards, Honeycutt, & Zagacki, 1988, p. 24). These mental experiences of conversation may precede, follow, or even occur simultaneously with actual interaction and function primarily to rehearse or review conversation (Honeycutt, 2003). In an imagined interaction, the social actor forms a mental representation (verbal, visual, or a combination of verbal and visual) of a conversation and may experience it in the form of a daydream. Stressful and conflictive situations frequently stimulate imagined interactions (Honeycutt, 2003).

The current study was designed to investigate whether or not the frequency and pleasantness of the imagined interactions which college students have about financial issues (spending behaviors and credit card use) with their parents differ depending on how their parents manage financial problems (i.e., argue, work together to resolve issues, one parent manages the financial issues) and the type of communication coalitions existing within the family (i.e., cross-generational coalition, parental coalition) in terms of spending behaviors and credit card use. The study also was designed to investigate how a college student’s attitudes toward money and credit are related to the frequency and pleasantness of the imagined interactions he or she has with parents about spending behaviors and credit card use.

It is important to understand the frequency and tone of imagined interactions because intrapersonal communication is the base in all other communication arenas (Honeycutt, 2003). If unpleasant family dynamics routinely occur during the discussion of financial issues then young adults may report less pleasant imagined interactions. Unpleasant imagined interactions may keep a teen from turning to his or her parents for advice or assistance with financial problems. Frequent imagined interactions may be related to the attitudes young adults hold about money. For example, those who see money as a source of power and control may report thinking more about talking to their parents about money (i.e., have more frequent imagined interactions). This research adds to our knowledge of the cognitive processes associated with family communication and the interfamily dynamics surrounding spending behaviors and credit. The results are of interest to scholars studying family communication and family financial issues as well as financial advisors attempting to help families with financial problems.

The next sections identify the functions and characteristics of imagined interactions, summarize research about financial communication within the family, discuss the idea of family differentiation levels (FDLs), and review research on money and

credit attitudes. The literature review concludes with the research rationale and research questions.

## Literature review

### Imagined interaction

Grounded in symbolic interaction theory, Rosenblatt and Meyer (1986) developed the notion of imagined interaction from Mead's (1934) concept of internal dialog. Rosenblatt and Meyer proposed that in a counseling situation imagined interactions may be used to simulate conversations with significant others who are not emotionally or physically available to client patients. They proposed that imagined interactions are similar to actual interactions in that they involve significant others and may be rambling or coherent, brief or lengthy. Others (e.g., Edwards et al., 1988; Zagacki, Edwards, & Honeycutt, 1992) also identified imagined interaction as an element of social cognition, proposing that imagined interactions allow individuals "to plan and measure social action" (p. 41) as instantiations of schemas and scripts (Schank & Abelson, 1977). Edwards et al. found that imagined interactions involve significant others as imagined partners. The focus of this study is on the imagined interactions college students have with their parents about financial issues.

### Functions of imagined interaction

Imagined interactions serve a variety of functions (Honeycutt, Zagacki, & Edwards, 1990). Two of the most important are rehearsal (Edwards et al., 1988), in that they are used to prepare for future interaction, and thinking about or resolving conflict (Honeycutt, 2003). Clarification of thoughts and feelings is also facilitated through imagined interaction (Edwards et al., 1988; Rosenblatt & Meyer, 1986) as is catharsis or stress reduction (Edwards et al., 1988; Gotcher & Edwards, 1990). Other functions may include substituting for actual interaction such as when actual communication is negatively sanctioned or when a significant other is not physically present (Berkos, Allen, Kearney, & Plax, 2001). The imagined interactions research highlights the roles that imagined interactions can play in enabling social actors to deal with a salient or stressful issue in their daily lives. Individuals facing situations as disparate as a cancer diagnosis, separation from a loved one, and marital distress use imagined interactions as a coping mechanism.

### Characteristics of imagined interaction

Researchers have identified a number of characteristics associated with imagined interaction. Imagined interactions may vary in their activity, pleasantness, self-dominance, proactivity, retroactivity, discrepancy, variety, and specificity (Honeycutt, 2003). Of particular interest to the present study are activity and pleasantness.<sup>1</sup>

<sup>1</sup> Other characteristics of imagined interaction are theoretically relevant to family communication and financial issues. However, in a pilot study we discovered that proactivity was strongly correlated with activity and did not provide additional insight. We also experienced difficulty with the reliability of measuring discrepancy and so did not include it in this investigation. Other characteristics were of less theoretical interest to the present investigation and were not included in order to control the length of the questionnaire.

Activity refers to how regularly or frequently an individual experiences an imagined interaction and is associated with the amount of actual communication that an individual experiences. Consistent with their levels of social communication, women have more frequent imagined interactions than do men (Edwards, Honeycutt, & Zagacki, 1989) and chronically lonely individuals experience fewer imagined interactions than do non-lonely individuals (Edwards et al., 1988). Similarly, cancer patients' actual communication about their illness is correlated with the frequency of their imagined interactions about the illness (Gotcher & Edwards, 1990). A positive relationship exists between the frequency of imagined interactions and levels of anxiety and depression (Kroll-Mensing, 1992, unpublished data).

Pleasantness refers to an individual's emotional experience of an imagined interaction—the degree to which it is enjoyable and free of conflict. Imagined interactions that are primarily verbal are less pleasant than those that incorporate more visualization (Zagacki et al., 1992). For cancer patients, pleasantness is correlated with imagining themselves to be free of cancer (Gotcher & Edwards, 1990). Woods and Edwards (1990) examined the imagined interactions of first year university students and their parents attending an on-campus orientation session. Parents reported more pleasant and more frequent imagined interactions than the students reported.

Therefore, people have imagined interactions about topics salient or stressful to them prior to and in place of actual interaction. Individuals vary as to the frequency and pleasantness of their imagined interactions. As yet, researchers haven't linked financial attitudes or family financial communication to imagined interaction. This is a fertile area for research since financial issues can be stressful and family dynamics may make an open problem-solving orientation to dealing with financial problems problematic.

### Financial communication within the family

Researchers have investigated other aspects of family communication about financial issues. They have identified various financial topics parents and their children discuss (e.g., American Savings Education Council, 1999, 2001; Bowen, 1996; Klein, 1998) and have focused on children's socialization as consumers and their development of consumer skills (e.g., O'Guinn & Faber, 1988). The childhood socialization model articulated by Moschis (1985) has been an important factor in shaping the research. Working within this model, scholars have studied various consumption-related issues (e.g., Lachance, Legault, & Bujold, 2000; Mangleburg & Grewal, 1997; Moschis & Moore, 1984; Moschis, Moore, & Smith, 1983; Viswanathan, Childers, & Moore, 2000).

Two other major approaches to communication have been linked to financial topics: parenting styles (e.g., Baumrind, 1968, 1978; Goldscheider, Thornton, & Yang, 2001; Parrott & Bengtson, 1999) and family communication patterns (e.g., Carlson, Grossbart, & Tripp, 1990; Chaffee, McLeod, & Atkin, 1971; Fitzpatrick & Ritchie, 1994; Ritchie, 1991; Ritchie & Fitzpatrick, 1990). Once again, the primary focus has been on consumer socialization. The current study broadens the research on family financial communication by looking at money management patterns, FDLs in terms of financial communication, attitudes regarding money and credit, and imagined interactions.

## Money management patterns

As more and more women enter the workforce, spousal economic behavior and family financial allocation patterns have increased in complexity (Mano-Negrin & Katz, 2003). Yet there is limited evidence of how spouses organize their economic decisions and even less information about how these decisions affect their children. Several theoretical perspectives explain family economic behavior (i.e., the common preference hypothesis, the Nash bargaining approach) (see Mano-Negrin & Katz, 2003 for a review of these theoretical perspectives). The “family unit” approach sees the family as a unified group in which members discuss and reach a consensus regarding financial decisions. Becker’s (1974) altruist hypothesis argues that one spouse may control the household economic behavior and allocate resources in order to meet the individual needs of the other family members. Lundberg and Pollack (1993) distinguish between a marriage between two optimizing individuals and a non-cooperative marriage. Similar patterns are evident in three of Pahl’s (1989) five money organization patterns.

The current study focuses on four potential patterns (the father makes the financial decisions, the mother makes the financial decisions, the parents work together to make financial decisions, and the parents argue about financial decisions). Do college students’ imagined interactions about financial discussions with their parents differ depending on which of these four patterns they perceive as occurring within their family? We expect less pleasant and more frequent imagined interactions to occur in families where the money management pattern primarily involves arguing and more pleasant imagined interactions to occur in families where the parents work together to make financial decisions.

## Family differentiation

Researchers increasingly have focused on the balance between intimacy and individuality that adolescents experience as they distance themselves from their family (Cohen, Vasey, & Gavazzi, 2003; Sabatelli & Mazor, 1985). Distance regulation is especially relevant to adolescents (Chun & MacDermid, 1997) and to college freshmen that must balance family ties with their increased autonomy. Distance regulation patterns have been conceptualized as FDL, a systems construct used to represent levels of individuality and intimacy either tolerated or accepted in the family (Sabatelli & Anderson, 1991). Well-differentiated families allow members to maintain both a sense of emotional connectedness and separateness. Family members are encouraged to speak for themselves and communicate respect and confirmation to others (Anderson & Sabatelli, 1990, 1995). Such families may be more adaptable and flexible in the face of change (Bartle & Sabatelli, 1989). Poorly differentiated families are characterized by limited emotional support, empathy, integration, and cohesion along with conflict, anxiety, and stress (Bomar & Sabatelli, 1996). In such families, family rules limit individuality and autonomy. FDL has been linked theoretically and clinically to adolescent functioning and various dysfunctional behaviors (see Cohen et al., 2003), psychosocial maturity (Bomar & Sabatelli, 1996), a sense of identity (Bartle & Sabatelli, 1989), and individuation (Chun & MacDermid, 1997).

Individuals within the same family may perceive different experiences of connectedness and separateness (Gavazzi, Sabatelli, & Reese-Weber, 1999). Children also may have different experiences of connectedness and separateness with each

parent (Bartle & Sabatelli, 1989). Various dyads can be combined to investigate cross-generational coalitions within a family. A cross-generational coalition exists when a respondent reports either a well-differentiated relationship with one parent and a poorly differentiated relationship with the other parent or a poorly differentiated relationship between the two parents. A child's participation in a parent-child cross-generational coalition can have a disruptive influence on his or her development (Anderson & Sabatelli, 1992) and has been associated with lower perceived family support, higher levels of anxiety, and higher levels of depression (Sabatelli & Anderson, 1991).

A link exists between the differentiation literature and imagined interactions. Imagined interactions provide a glimpse into an individual's internal dialog. This internal dialog is critical to the development and maintenance of a definition of self (Rosenblatt & Meyer, 1986). A teen's internal dialog with a parent may perpetuate feelings of confidence or worthlessness depending on the differentiation level existing within the relationship. For example, a teen involved in a cross-generational coalition with the less financially powerful parent may experience frequent and unpleasant imagined interactions with the other parent and develop an unhealthy (e.g., powerless, manipulative) view of how to communicate about and manage financial decisions. Counselors can focus on clients' internal interactions as a way to help facilitate healthy differentiation from the family of origin (Rosenblatt & Meyer, 1986). Constructive conflict management can be enhanced if people imagine positive interactions and outcomes in their imagined interactions (Honeycutt, 2003). This study's results may be useful in helping family financial advisors use guided imagined interactions to facilitate more healthy financial discussions in families characterized by low differentiation or cross-generational coalitions.

### Credit and money attitudes

In addition to family communication styles, various antecedent variables including adolescents' values and beliefs (Fox, Bartholomae, & Gutter, 2000; Roedder-John, 1999) affect the consumer socialization process. This study uses both credit attitudes and money attitudes to examine adolescent values and beliefs. It also examines how family dynamics regarding financial issues are related to these attitudes as well as to individual's imagined interactions.

Previous researchers have measured college students' attitudes toward credit (e.g., Hayhoe, 2002; Hayhoe, Leach, & Turner, 1999; Xiao, Noring, & Anderson, 1995; Yang & Lester, 2001) in terms of their feelings about credit cards (affective), their knowledge of credit cards (cognitive), and their usage of credit cards (behavioral). In addition, researchers have examined money attitudes and behaviors (e.g., Bailey & Lown, 1993; Furnham, 1984; Hanley & Wilhelm, 1992; Hayhoe, 2002; Hayhoe et al., 1999; Hayhoe & Wilhelm, 1998; Masuo, Miroutu, Hanashiro, & Kim, 2004; Wilhelm & Varcoe, 1991; Yamanchi & Templer, 1982). The most widely used money attitude scale is Furnham's (1984) Money Beliefs and Behaviors Scale (MBBS). Scale items measure six areas: obsession, retention, effort/ability, security, inadequacy, and power/spending. Obsession represents an emphasis on thinking about different aspects of money. Retention represents not wanting to spend money even when it is available. Effort/ability represents the concept that one does not deserve one's income. A high score on this money attitude implies that the respondents feel they should be paid more for their labor. Security represents being

knowledgeable about one's exact financial position and being willing to make difficult decisions where money is concerned, including a reluctance to use credit. Inadequacy represents worrying about not having enough money. Power represents the use of money as a form of control over one's life or over others. Hayhoe et al. (1999) found that students who do not have credit cards are more likely to score higher on the money attitudes of obsession and retention as compared with students having credit cards. Students with more credit cards score higher on the effort/ability money attitude than students with fewer cards.

We might expect those who score higher on the money attitudes of obsession, inadequacy, and power to report more frequent imagined interactions with their parents about financial issues since these issues are more salient to them. Family financial advisors might help their young clients by using guided imagined interactions to help minimize potentially problematic outcomes associated with such attitudes.

### Rationale and research questions

Imagined interactions have been linked to conflict in the form of imagined interaction conflict linkage theory (see Honeycutt, 2003). Some people construct an imagined interaction in a dialog in advance of a conflict (Zagacki et al., 1992) as they focus on emotional concerns and situational challenges (such as financial conflicts) (Berkos et al., 2001). Others replay past conflicts in their imagined interactions (Honeycutt, 2003). Financial matters constitute a particularly sensitive topic related to family conflict and, therefore, it is important to focus on the frequency and pleasantness of the imagined interactions teens report having with their parents.

"Frequently when we are talking about money in a family setting, we are talking about it from a negative standpoint," according to Elizabeth Schiever, past director of the National Endowment for Financial Education High School Financial Planning Program (Picard & Fullmer, 1999, p. 110). Olson et al. (1983) found that the most common stressor in families concerned finances; the fourth most common stressor focused on children's education expenses. Some families rarely discuss finances, or finances are a taboo topic (Klein, 1998; Olson & DeFrain, 2003). Therefore, given the salience of and possible conflict associated with financial issues, an investigation of the imagined interactions students have with family members should provide insight into family dynamics and financial attitudes.

Imagined interactions are useful where individuals believe a direct confrontation would harm subsequent interactions and in relationships characterized by verbal aggression, put-downs, and threats to a member's self-esteem (Berkos et al., 2001). Based on previous research, it is likely that in families where parents argue about financial issues, the college students would experience more frequent and less pleasant imagined interactions when compared to families in which the parents work together to solve credit or financial problems. Imagined interactions also are likely to be more frequent and less pleasant for respondents that report being in a cross-generational coalition (where respect is higher between one parent and the student than with the other parent) when compared to respondents that report the existence of no family coalitions during financial discussions (where the respect is equal among all members in the family or higher between both parents and their student than between only the parents themselves) and parental coalition respondents (where the respect is higher between the parents than between either or both parents and the student). This should be true given the reduced differentiation in cross-generational

coalition families that are characterized by limited emotional support, empathy, integration, and cohesion; and increased conflict, anxiety and stress.

Researchers have not previously investigated the relationship between imagined interactions and attitudes involving money and credit. However, perhaps students who score low on the money attitude of inadequacy would have more frequent but less pleasant imagined interactions given that low scores indicate some sense of personal inadequacy about such matters. Students with high affective and cognitive credit attitudes, as well as those that score high on the money attitudes of obsession, retention, power/spending, and independence, might have more frequent imagined interactions.

Therefore, this study explores the following research questions:

- RQ1: Are imagined interactions more active and less pleasant in families in which parents argue about credit and other financial issues when compared to families in which the parents work together to resolve financial problems or where one parent manages the financial issues?
- RQ2: Are imagined interactions more active and less pleasant in families in which cross-generational coalitions exist than in families in which parental coalitions or no coalitions exist?
- RQ3: Are imagined interactions more active and less pleasant for students depending on the attitudes they hold toward money and credit?

## Methods

### Procedure

College students in Arkansas, Kentucky, Louisiana, and Missouri completed the survey. College students are an ideal population for this study. College freshmen and sophomores are at a crossroads in the process of distancing from their parents. Many are living away from home for the first time and are beginning to make new and more complex financial decisions. Their financial attitudes and beliefs increasingly have implications for their financial health. However, they remain partially financially (and emotionally) dependent on their parents. This dependence means they are likely to have more frequent financial discussions with their parents than the average college graduate will.

In Arkansas and Kentucky, the survey was administered to intact sections of the basic communication class on each campus. In Missouri, respondents were enrolled in multiple sections of a freshman seminar. In Louisiana, students enrolled in first-year English composition classes ( $n = 234$ ) and first-year students in residence halls, standing in line for advising, and enrolled in communication courses ( $n = 68$ ) completed the questionnaires. In Arkansas an on-line version of the survey was used so as to not take up class time. Paper versions were disseminated in Kentucky, Louisiana, and Missouri. A series of one-way ANOVA's and chi-squares were calculated to see if significant differences between the four states emerged for the variables. Significant differences did not emerge. This suggests the different survey administration methods were not a major source of error variance. In each location, informed consent was gathered. Students in Arkansas, Kentucky, and Missouri



received class credit for completing the survey and alternative assignments were available for those who did not want to complete the survey.

Prior to survey administration, three pilot tests were conducted to assess the survey's composition and length. A pilot test ( $n = 20$ ) was conducted in Arkansas to see how long it took to complete an initial version of the survey and to see how respondents reacted to questions constructed for the study. A pilot test was conducted in Louisiana ( $n = 80$ ) to identify the imagined interaction subscales most closely related to the communication and financial questions on the scale. A pilot test was conducted in Kentucky on the revised survey ( $n = 50$ ).

Initially, the study was conceptualized as focusing only on students with a credit card. However, the pilot tests indicated that almost half of the freshmen did not have a credit card. As a result, two versions of the survey were created, one for students with credit cards and one for students without credit cards. Separate analyses appeared warranted since previous studies (e.g., Hayhoe et al., 1999) identified differences in college students' attitudes toward money and credit depending on whether or not they had a credit card.

The questions were arranged so that regardless of the survey version they completed respondents answered the questions in the same order. Extra questions on the have-credit card survey version were placed at the end of the survey prior to the demographics questions so they could be easily deleted from the no-credit card version. Any time the words, *credit* or *credit card*, appeared in the have-credit card version they were replaced with *spending*, *spending habits*, or *spending behaviors* on the no-credit card version. The wording on the money attitude items was the same on both survey versions.

## Sample

The researchers received 1,293 completed surveys. Respondents were in college in Arkansas ( $n = 514$ , 40%), Louisiana ( $n = 287$ , 22%), Kentucky ( $n = 283$ , 22%), and Missouri ( $n = 209$ , 16%). Over half (54%) were residents in the state where they attended college. Most respondents were 18 (61%) or 19 years old (24%). Most were female (60%), single (98%), and full-time students (99%). The majority (92%) were freshmen (77%) or sophomores (15%). The researchers sought a large sample of first-year students under the assumption that they were more likely to be undergoing parent-child distance regulation issues associated with their increased autonomy. Most respondents were White/Caucasian (87%) and US citizens (98%). Respondents majored in 40 different subjects. These majors were grouped into 16 categories. The largest four categories were: (a) business, marketing, economics, finance, insurance, or accounting (26%); (b) undecided (19%); (c) the humanities, English, history, communication, language, or math (13%); and (d) nursing, dietetics, pre-med, pharmacy, kinesiology, or pre-vet (10%). Most students lived in residence halls (58%), although others lived in an apartment (15%), at home (11%), in an off-campus house (9%), or in a Greek house (6%).

Given the number of nontraditional families in our society, respondents were asked who they were referring to when responding to the *parent* questions: mother, father, grandmother, grandfather, mother's partner, father's partner, stepmother, stepfather, female guardian, and male guardian. Most (43%) indicated their mother and father or either their mother or their father (56%). Nine percent indicated a stepparent. Only a few said their grandparent ( $n = 19$ ) or their parent's partner ( $n = 12$ ).

Specifically regarding money matters, these students reported owing an average of \$856 in student loans. Their parents paid an average of 53% of their monthly expenses. Almost half (49%) had one or more credit cards. Most had not taken a unit in high school (81%) or college (93%) where they learned how to manage their credit cards or personal finances. Most (92%) did not have a full-time year-round job. Many worked between semesters (60%) or during the school year (51%). Two-thirds (66%) did not have jobs during spring break. When asked how many hours per week they worked during the summer, 12% said none, 15% said fewer than 20, 20% said between 21 and 30, 43% said between 31 and 40, and 10% said over 40.

## Measures

Seven items from the imagined interaction scale (Honeycutt et al., 1990) were used to measure the activity (frequency) of experiencing imagined interactions and the pleasantness of the imagined interactions. Rather than asking about imagined interactions in general, the items were rewritten to reflect imagined interactions about credit card use (for participants with credit cards) or about spending behaviors (for participants without credit cards). Previous research has adapted items to investigate imagined interactions about specific topics (e.g., Berkos et al., 2001; Gotcher & Edwards, 1990; Woods & Edwards, 1990). Three statements were used to measure imagined interaction frequency (Cronbach's  $\alpha = 0.84$ ): (a) "I have many imagined interactions with my parents regarding my credit card use/spending behaviors," (b) "I frequently have imagined interactions with my parents about my credit card use/spending behaviors," and (c) "I have a lot of imagined interactions with my parents about my credit card situation/spending behaviors." One item was dropped from the pleasantness scale ("I feel good about my imagined interactions with my parents on this topic") to increase reliability, leaving three statements ( $\alpha = 0.83$ ) to measure imagined interaction pleasantness: (a) "My imagined interactions with my parents about my credit card use/spending behaviors usually involve conflicts or arguments," (b) "I dislike most of my imagined interactions with my parents about my credit card situation/spending behaviors," and (c) "My imagined interactions with my parents about my credit card use/spending behaviors are quite unpleasant."

Two scales were used to study credit and money attitudes. Credit attitudes were measured using a modified version of the credit attitude scale (Hayhoe et al., 1999; Xiao et al., 1995). A 12-item scale employed by Hayhoe et al. (1999) was used to study credit attitudes. Answer options ranged from 1 = strongly disagree to 5 = strongly agree. Credit attitudes were measured on three dimensions: affective, cognitive, and behavioral. The affective dimension ( $\alpha = 0.76$ ) was measured using three items: (a) "I love to have a credit card," (b) "I like using credit cards," and (c) "My credit card(s) makes me feel happy." The cognitive dimension ( $r = 0.59$ ) was measured using two items: "Heavy use of credit cards results in heavy debt," and "The cost of using credit cards is too high." The behavioral dimension ( $\alpha = 0.80$ ) was measured using the following items: (a) "I want to possess more credit cards than I now have," (b) "I would like to apply for more credit cards," and (c) "I would like to try all kinds of credit cards."

A modified version of the MBBS (Furnham, 1984) aimed at college students was used to measure money attitudes. Five of the scales were the same as those Furnham developed: obsession, power, effort, inadequacy, and retention. Furnham's security

scale was relabeled independence for college students. Answer options ranged from 1 = strongly disagree to 5 = strongly agree. Obsession ( $\alpha = 0.79$ ) was measured using six items: (a) “I would do practically anything legal for money if it were enough,” (b) “Money is the most important goal in my life,” (c) “I believe money is the only thing that I can really count on,” (d) “I believe money can solve all my problems,” (e) “I believe time not spent on making money is time wasted,” and (f) “Money can buy everything.” Power ( $\alpha = 0.70$ ) was measured by three items: (a) “I sometimes buy friendship by being very generous with those I want to like me,” (b) “I often use money as a weapon to control and intimidate those who frustrate me,” and (c) “I sometimes feel superior to those who have less money than I do regardless of their ability and achievement.” Effort ( $r = 0.49$ ) was measured with two items: “I believe my present income is about what I deserve, given the job I do,” and “I believe my present income is far less than I deserve given the job I do.” Inadequacy ( $\alpha = 0.61$ ) was measured by three items: (a) “I worry about my finances most of the time and what I could do with it,” (b) “I am worse off (in monetary terms) than most of my friends think,” and (c) “Most of my friends have more money than I do.” The lower the score on this scale, the higher a person’s feeling of inadequacy. Retention ( $r = 0.65$ ) was measured with two items: “I am proud of my ability to save money,” and “I budget my money very well.” Independence ( $\alpha = 0.75$ ) was measured with four items: (a) “Money gives you autonomy and freedom,” (b) “Money can help you express your competence and abilities,” (c) “Money can give you the opportunity to be what you want to be,” and (d) “Money means power.” The wording on the money attitude items remained the same on both versions of the survey.

In order to investigate communication surrounding family money management patterns respondents were asked: “Which of the following best describes how your parents discuss money issues?” The answer options were: (a) they argue, they work together to form a plan for paying off credit card debt, (b) my father manages the money issues and he rarely discusses them with my mom, (c) my mom manages the money issues and she rarely discusses them with my dad, and (d) I don’t know. In response to this question, most participants indicated that their parents work together to form a plan for paying off credit card debt (46%), or said they didn’t know (24%). Only 7% of the respondents said their parents did not use credit cards. While not all families that use credit cards carry a balance on their cards, they still need a plan to pay the bill in full or only to pay part of the bill. Equal numbers indicated (a) father managed the financial issues and he rarely discussed them with mother (10%), (b) mother managed the financial issues and she rarely discussed them with father (11%), or (c) said that their parents argued about financial issues (9%). Students with and without credit cards did not differ in these percentages.

The Differentiation in the Family System Scale (DIFS) (Anderson & Sabatelli, 1990, 1992) was modified to examine respondents’ perceptions of communication regarding credit cards or spending behaviors occurring between different family dyads. Although differentiation is viewed as a family-system level variable, it is appropriate to look at individual respondents since the family system is a context with a different reality for each member (Anderson & Sabatelli, 1995; Bomar & Sabatelli, 1996). Respondents’ perceptions of the multiple dyadic relationships existing within their families were measured to control for error associated with measuring only one relationship (e.g., a close relationship between mother and son). Each participant provided an assessment of how various members of the family interact with each other in order to assess behavioral patterns that confirm or

disconfirm the individual (i.e., respect the person and his or her personal barriers), the level of intimacy in the relationship (i.e., behaviors that show support, caring, or empathy), or both (Anderson & Sabatelli, 1992).

Only part of the 13-item DIFS scale was used in order to keep the questionnaire to a manageable length. Four items using 5-point subscales (with the higher score indicating a higher level of differentiation) were repeated for each dyadic relationship examined (i.e., the student's perception of (a) the student–father relationship, (b) the student–mother relationship, (c) the mother–father relationship, (d) the father–student relationship, and (e) the mother–student relationship). The items included: (my father/my mother/I) shows respect for (my/my father's/my mother's) viewpoints about when it is OK for (me/my father/my mother) to (use a credit card/spend money)<sup>2</sup> even when they differ from (his/her/my) own. For example, one item read, “*my father* shows respect for *my* viewpoints about when it is OK for *me* to use a credit card even when they differ from *his* own.” Another item read, “*my mother* shows respect for *my father's* viewpoints about when it is OK for *my father* to use a credit card even when they differ from *her* own.” The remaining four items were: (a) demonstrates respect for (my/my father's/my mother's) privacy; (b) tells (me/my father/my mother) what (I/he/she) should be thinking about issues; and (c) responds to (my/my father's/my mother's) feelings in an understanding way. These items were selected because they best illustrate open communication and respect for autonomy. Respondents rated all the items for each relational dyad (e.g., student–mother) before moving on to the next relational dyad (e.g., student–father).

Previously, the DIFS demonstrated adequate psychometric properties and construct validity (cf. Anderson & Sabatelli, 1992; Bartle & Sabatelli, 1989; Hock, Eberly, Bartle-Haring, Ellwanger, & Widaman, 2001; Sabatelli & Anderson, 1991). The alphas of the DIFS subscales in this study ranged from 0.81 to 0.90, which is consistent with results obtained by other researchers (e.g., Anderson & Sabatelli, 1992; Bomar & Sabatelli, 1996). The various scores were summed to identify respect regarding credit card (spending) viewpoints, privacy, and feelings about credit card use (spending behaviors) within the (a) marital subsystem (mother and father;  $\alpha = 0.77$ ), (b) parental subsystem (father/student and mother/student;  $\alpha = 0.73$ ), (c) father–student subsystem;  $\alpha = 0.55$ , and (d) mother–student subsystem;  $\alpha = 0.63$ . Following standardized scoring procedures (see Anderson & Sabatelli, 1990), three types of family coalitions were determined: cross-generational, parental coalition, no coalition. Of the 43% of the families fitting clearly into one of the three categories, 28% were cross-generational coalitions, 52% had no coalitions, and 20% had parental coalitions.

## Results

### Preliminary analyses

We conducted two analyses prior to testing the research questions. First, we examined the relationship between the two imagined interaction variables. Imagined interaction activity concerning financial issues was inversely correlated with imagined

<sup>2</sup> Because not all respondents had credit cards, one survey focused on credit card use and the other on spending behaviors. Therefore, the DIFS questions differed depending on whether or not the respondent had a credit card.

interaction pleasantness about financial issues,  $r = -0.68$ . Second, we compared the two subsets of the sample (have-card, no-card) on the imagined interaction variables and the credit and money attitudes. Compared to students who reported on *spending issues*, students with credit cards had lower imagined interaction frequency scores and higher scores for imagined interaction pleasantness, credit attitudes, independence, and power (see Table 1 for descriptive statistics and  $t$ -values).

### Primary analyses

The first research question explored whether or not imagined interactions are more frequent and less pleasant in families where parents argue about credit and other financial issues when compared to families where the parents work together to resolve financial problems or where one parent manages the financial issues. There was no significant difference in how parents made decisions about money and the frequency of imagined interactions respondents reported,  $F(4, 1198) = 1.72$ ,  $p = 0.14$ . However, a one-way ANOVA indicated there was a significant effect on the pleasantness of the imagined interactions,  $F(4, 1188) = 4.49$ ,  $p < 0.001$ ,  $\eta^2 = 0.01$ , depending on parents' communication style. Pleasantness of imagined interaction was greatest when parents worked together to form a plan for paying off credit card debt and lowest when parents argued (see Table 2 for descriptive statistics).

The second research question asked if imagined interactions are more frequent and less pleasant in families where cross-generational coalitions exist than in families where parental coalitions or no coalitions exist. There were significant differences in the reported frequency of the imagined interactions people had depending on the type of coalitions present in families,  $F(2, 544) = 8.56$ ,  $p < 0.001$ ,  $\eta^2 = 0.03$ . Respondents in parental coalition and in cross-generational families reported having more frequent imagined interactions than those in no-coalition families. A one-way ANOVA,  $F(2, 538) = 19.91$ ,  $p < 0.001$ ,  $\eta^2 = 0.07$ , indicated respondents from no-coalition families also reported more pleasant imagined interactions than those from cross-generational or parental coalition families (see Table 3 for descriptive statistics).

**Table 1** Imagined interactions and credit attitudes depending on credit card status

| Variable     | Credit card |      |     | No-creditcard |      |     | $t$     |
|--------------|-------------|------|-----|---------------|------|-----|---------|
|              | $M$         | SD   | $n$ | $M$           | SD   | $n$ |         |
| II Frequency | 1.91        | 0.91 | 621 | 2.25          | 0.93 | 648 | -6.50** |
| II Pleasant  | 3.93        | 0.94 | 616 | 3.66          | 0.89 | 642 | 5.23**  |
| Obsession    | 2.01        | 0.67 | 638 | 2.00          | 0.66 | 654 | 0.42    |
| Independent  | 2.90        | 0.77 | 637 | 2.73          | 0.77 | 654 | 3.89**  |
| Power        | 1.75        | 0.69 | 638 | 1.65          | 0.65 | 654 | 2.59*   |
| Inadequate   | 3.22        | 0.80 | 638 | 3.11          | 0.76 | 654 | 2.57*   |
| Retention    | 3.33        | 0.98 | 638 | 3.31          | 0.96 | 654 | 0.42    |
| Effort       | 3.58        | 0.89 | 622 | 3.55          | 0.88 | 636 | 0.53    |
| Affective    | 2.76        | 0.82 | 637 | 2.25          | 0.83 | 653 | 11.07** |
| Behavior     | 1.87        | 0.78 | 637 | 1.98          | 0.79 | 653 | -2.47*  |
| Cognitive    | 3.55        | 0.93 | 637 | 3.71          | 0.86 | 653 | -3.28** |

II Frequency imagined interaction frequency, II Pleasant imagined interaction pleasantness

\* $p < 0.01$

\*\* $p < 0.001$

**Table 2** Imagined interaction frequency and pleasantness by family money management patterns

| Money management patterns | Imagined interaction |           |          |
|---------------------------|----------------------|-----------|----------|
|                           | <i>M</i>             | <i>SD</i> | <i>n</i> |
| <b>II Frequency</b>       |                      |           |          |
| Parents argue             | 2.20                 | 1.09      | 113      |
| Parents work together     | 2.05                 | 0.87      | 549      |
| Father manages            | 2.15                 | 0.94      | 124      |
| Mother manages            | 2.22                 | 1.03      | 127      |
| I don't know              | 2.03                 | 0.91      | 290      |
| <b>II Pleasant</b>        |                      |           |          |
| Parents argue             | 3.59 <sup>a</sup>    | 1.03      | 112      |
| Parents work together     | 3.89 <sup>a</sup>    | 0.83      | 543      |
| Father manages            | 3.66                 | 0.93      | 123      |
| Mother manages            | 3.65                 | 0.99      | 128      |
| I don't know              | 3.76                 | 0.97      | 287      |

*II Frequency* imagined interaction frequency, *II Pleasant* imagined interaction pleasantness

Note: Having the same superscripts differ significantly at  $p < 0.05$

**Table 3** Imagined interaction frequency and pleasantness by family coalitions

| Family coalition type      | Imagined interaction |           |          |
|----------------------------|----------------------|-----------|----------|
|                            | <i>M</i>             | <i>SD</i> | <i>n</i> |
| <b>II Frequency</b>        |                      |           |          |
| Cross-generation coalition | 2.02 <sup>a</sup>    | 0.91      | 153      |
| No coalition               | 1.81 <sup>a,b</sup>  | 0.86      | 284      |
| Parental coalition         | 2.21 <sup>b</sup>    | 0.99      | 110      |
| <b>II Pleasant</b>         |                      |           |          |
| Cross-generation coalition | 3.76 <sup>a</sup>    | 0.93      | 151      |
| No coalition               | 4.20 <sup>a,b</sup>  | 0.77      | 280      |
| Parental coalition         | 3.69 <sup>b</sup>    | 0.99      | 110      |

*II Frequency* imagined interaction frequency, *II Pleasant* imagined interaction pleasantness

Note: Having the same superscripts differ significantly at  $p < 0.05$

The third research question explored whether or not imagined interactions are more active and less pleasant for students depending on their attitudes toward money and credit. There were significant correlations between the frequency of the imagined interactions and all but one of the credit and money attitudes subscales (see Table 4 for the correlations between the variables). Imagined interaction frequency was positively correlated with the behavioral aspects (use) of credit. Imagined interaction frequency was positively correlated with thinking frequently about (a) all aspects of money, (b) perceiving money as a way to control others, and (c) judging money as a way to be independent. More imagined interaction frequency was associated with (a) worrying about not having enough money, (b) perceiving an inadequate linkage between compensation and ability, and (c) not wanting to spend money even when it is available.

There were significant correlations between the perceived pleasantness of the imagined interactions and most of the credit and money attitudes subscales. Pleasantness of imagined interaction was associated with (a) thinking less about money,

**Table 4** Intercorrelations among imagined interaction frequency and pleasantness, credit and money attitudes

| Variable        | 1       | 2       | 3       | 4      | 5       | 6       | 7       | 8     | 9       | 10      | 11 |
|-----------------|---------|---------|---------|--------|---------|---------|---------|-------|---------|---------|----|
| 1. II frequency | –       |         |         |        |         |         |         |       |         |         |    |
| 2. II pleasant  | –0.68** | –       |         |        |         |         |         |       |         |         |    |
| 3. Obsession    | 0.28**  | –0.24** | –       |        |         |         |         |       |         |         |    |
| 4. Independent  | 0.11**  | –0.13** | 0.44**  | –      |         |         |         |       |         |         |    |
| 5. Power        | 0.21**  | –0.17** | 0.46**  | 0.34** | –       |         |         |       |         |         |    |
| 6. Inadequate   | –0.22** | 0.26**  | –0.19** | –0.07  | –0.01   | –       |         |       |         |         |    |
| 7. Retention    | –0.16** | 0.20**  | –0.12** | –0.02  | –0.07** | 0.20**  | –       |       |         |         |    |
| 8. Effort       | –0.16** | 0.17**  | –0.18** | 0.00   | –0.10** | 0.21**  | 0.10**  | –     |         |         |    |
| 9. Affective    | 0.05    | –0.03   | 0.17**  | 0.22** | 0.25**  | 0.06    | –0.10** | –0.04 | –       |         |    |
| 10. Behavioral  | 0.16**  | –0.14** | 0.27**  | 0.14** | 0.32**  | 0.01    | –0.09** | –0.10 | 0.51**  | –       |    |
| 11. Cognitive   | 0.03    | –0.06   | 0.01    | 0.03   | –0.08** | –0.16** | –0.03   | 0.01  | –0.17** | –0.12** | –  |

II Frequency imagined interaction frequency, II Pleasant imagined interaction pleasantness

n = 1,290

\*\*p < 0.001

(b) not perceiving money as a way to control others, and (c) not focusing on money as a way to be independent. Imagined interaction pleasantness was also correlated with the behavioral (use) and cognitive (knowledge) aspects of credit. More pleasantness was associated with (a) less worry about having enough money, (b) more perceived linkages between compensation and ability, and (c) not wanting to spend money even when it is available.

**Discussion**

Imagined interaction activity about financial matters is strongly and inversely correlated with pleasantness, which is consistent with past research findings that activity is more associated with mixed emotions than with positive emotions (Zagacki et al., 1992). College students who have frequent imagined interactions about discussing their credit card use or spending habits with their parents may be anticipating conflicts and, thus, have less pleasant imagined interactions. In such situations, the more frequent imagined interactions may be serving either as a rehearsal or a coping mechanism. During rehearsal, the college student may be attempting to strategically craft messages related to spending or credit knowing that parents may receive the message within a financial communication climate characterized by conflict or lack of respect. The more frequent imagined interactions also may serve as a coping mechanism and as a way to reduce anxiety because the college student feels limited in what he or she can actually say to a parent due to power imbalances or due to a concern for the relationship.

Respondents with credit cards report more pleasant imagined interactions and less frequent imagined interactions with their parents about their credit card use than did those without credit cards who reported on their imagined interactions about spending behaviors. Perhaps opening the issue up to spending behaviors widened the range of problematic financial topics respondents thought about when completing the survey. Spending behaviors is a broader category of which the use of

credit cards is only a subset. Those reporting on spending behaviors have more frequent imagined interactions than those reporting on credit card use discussions.

This study allowed us to look at cognitive implications for college students depending on how their family deals with financial issues. Money is an important symbol of differentiation between parents and children. And as much as there may be growing pains reflected in these imagined interactions, the thought of being perceived as less adult because of perceived money problems may lead to more frequent and less pleasant imagined interactions. Not surprisingly, imagined interactions are less pleasant if parents argue about money or if the family is characterized by a cross-generational or parental coalition. For those whose families argue about money, 68% belong in a cross-generational coalition family. So in these families there is a greater potential for conflict, which potentially leads to less pleasant imagined interactions. The college student faces more problematic conversations regarding spending and credit in these situations, necessitating more preplanning of conversations as illustrated by the increased frequency of imagined interactions.

Over half (59%) of the families who work together to form a plan for paying off credit card debt belong to a no-coalition family. In such a family, the imagined interactions are more pleasant regardless of whether they focus on credit card use or on spending behaviors. There is less need for them to have frequent imagined interactions because the family communication relationship is more open. In well-differentiated families members are encouraged to speak for themselves and communicate in ways that convey respect and confirmation to others (Anderson & Sabatelli, 1990, 1995). Results are less clear for the parental coalition family where the respect is greater between the parents than between one parent and the student or both parents and the student. Perhaps in the parental coalition family, students feel their parents do not respect their views and anticipate problems facing a united front from their parents and this influences their imagined interactions.

The importance of the current study is that it points to how the imagined interactions college students have with their parents are related to family discussions regarding credit and money-related issues as well as to students' attitudes about money and credit. By focusing on imagined interactions researchers can glimpse into the cognitive process whereby the family financial climate is related to a college student's attitudes and values about money and credit. Our imagined interactions with someone allow us to think and *talk* about feelings, values, standards, shoulds, and rules (Rosenblatt & Meyer, 1986). Imagined interactions give us a glimpse into the self-talk occurring in the children of families characterized by financial conflict or lack of respect.

Not only do college students' imagined interactions differ depending on family communication, but they are also related to students' attitudes toward money and credit. Imagined interactions with parents about financial issues are more pleasant for those college students who (a) feel they have enough money to meet their needs, (b) obsess less about money, (c) seek to save their money, and (d) have less desire for more credit cards. Their imagined interactions may consist of them displaying to their parents their desire to save money, and their optimism regarding being adequately compensated for their efforts and having sufficient money to meet their financial needs. College students who have more frequent imagined interactions with their parents about credit and spending behaviors (a) think more frequently about financial issues (obsession), (b) see money as a potential source of power and



independence, and (c) feel financially inadequate. They are more likely to want more credit cards.

Therefore, having frequent imagined interactions with parents appears to suggest the students may be encountering problems. These students may need assistance in finding ways to deal with worry and obsession. Financial advisors might help students learn how to guide their imagined interactions. Also, teaching them (a) the basics of personal finance, (b) how to form spending plans, (c) about saving for emergency, and (d) how to set realistic debt limits based on their income may lower the frequency of their imagined interactions. Providing them with such information may help increase their sense of control and potentially their sense of autonomy and respect within their family.

### Future research

The departure of a young adult for college is a stressful event within a family as the needs of the parents may clash with the needs of the teens (Honeycutt, 2003). It is important to explore the functions imagined interactions serve for both parents and their teens as they face new financial issues and roles. Future research might use an oral history interview (Honeycutt, 2003) to study the content of parent-teen financially related imagined interactions. Unfortunately, the actual content of the imagined interactions was not explored in this study due to constraints on the size of the survey. Are the college students thinking about interactions where they challenge parental attitudes about money and credit or are they planning messages where they show their attitude and value consistency with their parents?

More frequent imagined interactions may reflect more severe financial problems facing these families. Future research needs to collect information regarding family debt and income. Also, imagined interactions are very useful in understanding serial arguing in families where members repeatedly argue over issues (Honeycutt, 2003). In families where conflict or coalitions exist over financial issues it is important to investigate how families use proactive (rehearsing for the next encounter) and retroactive (replaying what transpired in the past) imagined interactions to either keep a conflict alive or successfully deal with the conflict. Future research is needed into these areas because “managing conflict begins at the intrapersonal level of communication in terms of imagined interactions” (Honeycutt, 2003, p. 69).

Unwise spending and credit behaviors can lead to serious problems for teens as well as adults. Therefore, it is important to explore factors related to financial attitudes, behaviors, and conflicts. This is the first study to explore the imagined interactions students have with their parents about spending and credit behaviors. Understanding how these mental conversations can be frequent and unpleasant points to a previously overlooked source of financial stress. Future research must be done about the role of this source of financial stress on students’ economic well being. To what extent does such stress influence future financial actions? Understanding these relationships will help to address issues in the design of personal finance programs directed toward high school and college students.

Longitudinal research following a group of students over their four years in college and then into their post-graduation years is needed to see how attitudes and the relationship between family financial communication, family coalitions, and imagined interaction change over time. Studies using the interventions mentioned

above need to be conducted to see if early intervention does change behavior and attitudes.

Additional research is needed to investigate other potential subtopics embedded in the larger concept of spending behaviors since respondents differed significantly depending on whether or not they were thinking about communication regarding spending behaviors or credit card use. Finally, the idea of family coalitions regarding credit and spending issues appears to be a fertile area for future research.

This study increases our understanding of how college students engage in imagined interactions about their conversations with parents related to spending and credit issues. It extends the literature investigating family financial conversations beyond a focus on children's socialization as consumers, parenting styles, and family communication patterns. It extends the family differentiation literature by focusing on how coalition type influences a teen's cognition in the form of stimulating imagined interactions. This study does not focus on cognition within a vacuum. Teens' imagined interactions about spending and credit behaviors are contextualized within family dynamics involving finances. The study adds to the credit and money attitude research by focusing on the process by which college students think about and respond to their environment by using imagined interactions.

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