Financial Prudence and Next Generation Financial Strain

Jeffery R. Hibbert[1], Ivan F. Beutler[2], and Todd M. Martin[3]

The purpose of this study is to examine the influence parents have in reducing the financial strain their children experience as early adults to the extent that financial prudence was modeled in the commonplace routines of home and family life during the child's growing-up years. Using data from students about to graduate from two large U.S. universities (from a southeastern and a western state), financial prudence was examined for its direct effect on the reduction of financial strain and also for two possible indirect effects through debt avoidance and credit card misuse. Financial prudence was found to decrease financial strain directly and also indirectly through debt avoidance and credit card misuse behaviors

Keywords: *Children and money, Credit, Economic stress, family finance*

Introduction

The purpose of this study is to examine the influence parents have on the financial wellbeing of the next generation. Children are likely to observe and absorb attitudes and behaviors from the prosaic or commonplace financial processes embedded in home and family life such as: spending or saving, making payments late or timely, and wise use or misuse of credit. It is therefore hypothesized that financial practices and behaviors modeled in the family of origin would affect financial outcomes such as the degree of financial strain experienced by children as they reach adulthood.

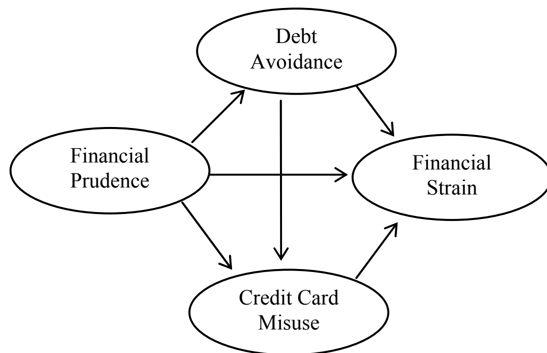
Widespread sentiments suggest that the lifestyle of early adults during the last century has changed from a focus on production to an obsession with consumption (Cauffman & Steinberg, 1995). Roberts and Jones (2001) warn that the consumer culture is growing at an increasing rate. Consistent with Belk (1988), they defined the consumer culture as "a culture in which the majority of consumers avidly desire, pursue, consume, and display goods and services that are valued for non-utilitarian reasons, such as status, envy provocation, and pleasure seeking (Roberts et al., 2001, p.214)." Droge and Mackoy (1995) reported that the desire to become a member of the consumer culture appears to be nearly universal. As such, Roberts and Sepulveda (1999) assert that compulsive spending is evolving into one of the most powerful forces shaping contemporary society. Credit is an important catalyst in financing a consumer lifestyle, and this type of lifestyle is being accommodated by a dramatic attitude change from abhorrence for debt to acceptance of exorbitant credit use as a normal part of life (Lea, Webley, & Walker, 1995; Zuckerman 2000). In an environment of compulsive spending funded by consumer credit misuse, early adults may become accustomed to a lifestyle that is financially unsustainable and filled with excessive financial strain. Prudent financial behaviors and practices modeled by parents with their children in everyday family life may help provide early adult children with alternatives and the inclination to actively engage in debt avoidance behaviors and resist credit card misuse. In these ways, modeled prudence may temper some of the influences of mass media, and enable participation in the home and in the consumer marketplace in ways that work toward a sustainable financial future.

Specifically, the purpose of this study is to examine the influence parents have in reducing the financial strain their children experience as early adults through the degree of financial prudence that the parents modeled during the childrearing years. As shown in Figure 1 and justified in the literature reviewed below, financial prudence modeled in the family of origin is examined for its direct effect on the reduction of financial strain. Two possible indirect effects of prudence were also examined in terms of increased debt avoidance behavior and decreased credit card misuse behavior.

[1] *Jeffery R. Hibbert, Research Analyst, University Administration, 106 Cater Hall, Auburn University, AL 36804, phone: 334-844-6094, fax: 334-844-6436, e-mail: hibbeje@auburn.edu*
[2] *Ivan F. Beutler, Professor, School of Family Life, Department of Home and Family Living, 1070 SWKT, Brigham Young University, Provo, UT 84602, phone: 801-422-6416, fax: 801-422-0230, e-mail: ivan_beutler@byu.edu*
[3] *Todd M. Martin, Financial Aid Administrator and Financial Counselor, A41 ASB, Brigham Young University, Provo, UT 84602, phone: 801-422-6431, fax: 801-422-0234, e-mail: todd_martin@byu.edu*
Research supported by the Family Studies Center, School of Family Life, Brigham Young University.

© 2004, Association for Financial Counseling and Planning Education *All rights of reproduction in any form reserved.*

Figure 1.
Model of Hypothesized Relationships



Conceptual Background

Research related to financial strain can be summarized in two categories, external pressures exerted by mass structural change and internal pressures exerted as a result of family decisions or practices.

Financial Strain Due to Societal Changes
Literature regarding societal changes that impose strain on families has been developed within a broad lens labeled economic distress. Four dimensions have been identified: (a) employment instability-lack of regular work and income, (b) employment uncertainty-regarding employment and income, (c) economic deprivation-such as declining real or relative income, and (d) economic strain-associated with assessment of upcoming circumstances (Voydanoff, 1990). A variety of negative outcomes have been associated with economic distress including: physical and mental illness (Vinokur, Price, & Caplan, 1996; Catalano, 1991), depression (Catalano, 1991; Catalano & Dooley, 1977; Dew, Bromet, & Schulberg, 1987; Hamilton, Broman, Hoffman, & Brenner, 1990; Kessler, Turner, & House, 1988, 1989), child abuse (Justice & Duncan, 1977), and marital and family disillusionment (Liem & Liem, 1988).

A different line of research has traced the effects of economic hardship on marital quality and adolescent adjustment (Conger, Conger, Elder, Lorenz, Simons & Whitbeck; 1990, 1992 & 1993), adolescent school performance (Conger, Conger & Elder, 1997). This literature has typically theorized that financial strain or worry results from some form of economic hardship. Then financial strain is typically hypothesized to be followed by negative family interaction such as increased hostility, or decreased warmth (Vinokur et al., 1996; Gutman and Eccles, 1999).

Strain Reduced by way of Perceived Prudence
Financial strain is defined as the level of stress experienced by an individual from their assessment of upcoming circumstances such as perceived financial inadequacy, financial concerns and worries, adjustments to financial change, and projected financial situation (Voydanoff, 1990). Voydanoff identifies several possible changes at the family level that could affect the level of financial strain experienced. Some of them can be understood to be the result of familial decisions such as: (a) number of hours devoted to paid employment versus unpaid family work, (b) family size, (c) attention given to family resource management, or (d) decisions to marry or divorce which usually have tremendous financial implications. Consistent with the perspective of this line of research, the approach taken in the present study was to treat financial strain as a dependent variable whose magnitude was a function of perceived financial prudence as modeled in the early adult's family of origin.

Parental Modeling of Financial Prudence
The grants economy as articulated by Boulding (1973) and Bivens (1976) recognized the importance of pure grant-one way transfers, many of which were inter-generational and some of which could be understood to result from the attitudes and behaviors modeled by parents and adopted by their children. Inter-generational ties can take a variety of forms. In a study of married Taiwanese children, both sons and daughters, the vast majority were found to provide continued financial support for their aging parents (Lee, Parish, & Willis, 1994). This pattern was observed in the face of rapid industrialization typically accompanied by a withdrawing of financial support from adult children to their parents. Similar inter-generational ties have been reported between two generations of women in Singapore (Teo, Graham, Yeoh, and Levy; 2003). However, these inter-generational transfers may be as much the result of broad cultural values rather than patterns and practices modeled in the family.

Much stronger support for inter-generational parent-to-child behavior transmission is provided by research on gendered family roles and housework allocation. For over three decades studies have provided empirical evidence of gender role inter-familial attitude transmission across generations (Acock and Bengtson, 1978; Blee & Tickamyer, 1995; Thornton, Alwin & Camburn, 1983). For example, Williams, Radin, and Allegro (1992) found that adolescent children held less stereotypical career aspirations if the father had been highly involved in the child's rearing a decade earlier. Using longitudinal data, Cunningham (2000) demonstrated that attitudes regarding housework

 © 2004, Association for Financial Counseling and Planning Education *All rights of reproduction in any form reserved.*

allocation reported by early adult children were consistent with the actual work allocations reported years earlier by their mothers. Furthermore, a similar pattern of housework allocation consistency was demonstrated between the mother's early reports of housework allocation behavior and her child's behavior years later as an early adult (Cunningham, 2001). This evidence supports the idea that at least some behaviors modeled by parents influence both attitudes and behaviors of their early adult children. In this same vein, it is probable that financial prudence modeled by parents may influence their children's behavior enough to measurably impact the level of financial strain they experience. This may even occur relatively early in life, for example as a college student on the brink of graduation, even though we have not found literature that would substantiate this directly.
Hypothesis 1. Financial prudence modeled in the prosaic routines of everyday family life will decrease financial strain in the life of children as early adults.

Financial Prudence and Debt Avoidance Behaviors
In his book *For Love and Money*, Poduska (1995) paints a picture of the consumer trapped in her row boat far from shore frantically trying to patch holes in the bottom of the boat. Her concern is that new holes are appearing faster than the old ones can be repaired. Poduska's message was that consumers need to be watching for ways to be financially prudent and plug spending holes, since the forces of mass media, one's own needs and wants, and the demands of modern life keep making new drains on resources. In a similar vein, pro-active debt avoidance behavior is a means of plugging debt-financed spending holes. An early adult college student is more likely to engage in such behaviors if those types of behaviors have been modeled in the home of their youth.
Hypothesis 2. Financial prudence modeled in the prosaic routines of everyday life will increase the use of debt avoidance behaviors in the next generation early adult children.

Debt Avoidance and Financial strain
Hilton and Devall (1997) concluded that economic strain, which they defined as "a perception of one's financial position, with attendant financial concerns and worries," is the subjective component of economic distress. In the stress literature it has been demonstrated that even more important than the actual stressor to which a person is exposed is that person's perception or subjective evaluation of the stressor. In addition, data based on subjective evaluation is frequently more readily accessible than objective measures of the stressors themselves. Since financial stress is this type of variable it has received a lot of attention in the literature (Mills, Grasmick, Morgan, & Wenk, 1992; Pearlin, Menaghan, Lieberman, & Mullan, 1981; Voydanoff, 1990). Noting deficiency in the literature, Hilton et al., (1997) developed a *Family Economic Strain Scale* (FESS). A year later Aldana and Liljenquist (1998) published a measure of *Financial Strain* based on five different domains. Both the Family Economic Strain Scale and the Financial Strain measure are based on respondent report and assessment regarding financial worries due to existing patterns of inadequate income to meet financial obligations and needs.

In this study, financial strain is based on college students' assessment of their financial situations in terms of worries and concerns as they near graduation. Hence their evaluations are forward-looking as they assess their financial positions and worries in life after graduation. Due to the pressures associated with self-imposed restraint, to the extent that students engage in debt avoidance behaviors they are also likely to report positive levels of financial strain. Beyond the hypothesized positive relationship between debt avoidance and financial strain, is another question which will be examined later: which produces more strain, debt avoidance or credit use?
Hypothesis 3: Higher levels of debt avoidance will be associated with higher levels of financial strain.

Prudence, Credit Card Misuse and Financial Strain
Roberts et al. (2001) urged that credit misuse among early adult college students was a serious and growing problem. Supporting this point he quoted Smith (1999): "The unrestricted marketing of credit cards on college campuses is so aggressive that it now poses a greater threat than alcohol and sexually transmitted diseases." He then demonstrated a profound moderating effect for consumer credit on the relationship between money attitudes and compulsive buying. For each relationship tested, credit card use was shown to have strengthened student attitudes toward materialistic compulsive spending and weakened money attitudes toward restraint and prudent spending. Thus credit card usage among college students was shown to exacerbate the problem of compulsive buying (Roberts et al., 2001).

In an environment of compulsive spending, students are at even greater risk if they have not had a positive model of financial prudence. Pressures to engage in behaviors of credit card misuse are great. Such behavior may provide short term financial relief from the exacting pressures of self restraint, but in the longer run payments will come due and create a second reality of even greater financial pressure.
Hypothesis 4. Higher levels of financial prudence will be associated with lower levels of credit card misuse..
Hypothesis 5. Higher levels of credit card misuse will be associated with higher levels financial strain.

© 2004, Association for Financial Counseling and Planning Education *All rights of reproduction in any form reserved.*

Method

Procedure

Data for this study came from a survey completed by graduate and undergraduate college students who had received some financial assistance through the University's Student Financial Aid Office. Thus, measures of financial prudence in their family of origin, their own debt avoidance and credit card behaviors, and their experienced level of financial strain were based on the reports of early adult college students. Each respondent expected to graduate at the end of the summer term of 2000 at University A (a university in the southeastern United States with enrollment greater than 23,000) or University B (a university in the western United States with enrollment greater than 27,000). Students selected for this study had received some form of student loan while enrolled and were required by federal mandate to receive exit counseling regarding their options and responsibilities for their loan(s).

The survey used in this study was a self-report data collection instrument. Students were not asked to supply any identifying information and were given the option of not completing the survey. Each student received the survey by mail and was asked to return the survey following the exit counseling. The total number of surveys mailed to students at both universities was 1,198. Of the surveys returned about five percent contained missing data and were not used in the analysis. However, 537 usable questionnaires were included in the final analysis for a response rate of 44.82%.

Description of respondents

Descriptive statistics of the demographic and financial variables for University A, University B and the combined group are presented in Table 1A-B. Students were approximately age 25. Less than 20% of the University A students were married compared to more than two-thirds of the University B students. In terms of racial/ethnic minority status, the University A group included almost 10% Black, University B included just over 3% Hispanic, but over 90% of the combined group was White. Survey respondents were also asked to indicate current debt levels with respect to student loans, credit card balances, and automobile loans. All of the students had received at least one student loan. For the combined group, almost 80% reported credit card debt with the average being $2,709. Over 70% had an automobile loan with an average balance of $4,858.

Table 1-A.
Percentage Distribution of Demographic and Financial Variables

	University A N=122		University B N=415		Total N=537	
	n	%	n	%	n	%
Gender						
Males	50	41.0	194	46.8	244	45.4
Females	71	58.2	221	53.3	292	54.4
Unreported	1	0.8	0	0.0	1	0.2
Race						
Black	12	9.8	1	0.2	13	2.4
American Indian	0	0.0	3	0.7	3	0.6
Asian/Pacific Isl.	1	0.8	7	1.7	8	1.5
Hispanic	0	0.0	14	3.4	14	2.6
White	106	86.9	378	91.1	484	90.1
Other	3	2.5	12	2.9	15	2.8
Marital Status						
Single	100	82.0	133	32.1	233	43.4
Married	19	15.6	279	67.2	298	55.5
Divorced/ Widowed	3	2.6	3	0.7	6	1.1
Career Level						
Undergraduate	93	76.2	343	82.7	436	81.2
Graduate	29	23.8	57	13.7	86	16.0
Professional	0	0.0	15	3.6	15	2.8
Have credit card debt	102	83.61	321	77.35	423	78.77
Have automobile loan	80	65.57	311	74.94	391	72.81

Table 1-B.
Means for Demographic and Financial Variables

	University A N=122		University B N=415		Total N=537	
	Mean	sd	Mean	sd	Mean	sd
Age	25.25	5.21	25.69	4.51	25.59	4.67
Current debt levels	20,040	13,625	12,484	11,231	14,160	12,201
Credit card debt for those who have	3,759	5,385	2,375	4,299	2,709	4,616
Automobile loan for those who have	5,273	7,792	4,742	6,056	4,858	6,442

© 2004, Association for Financial Counseling and Planning Education *All rights of reproduction in any form reserved.*

Measures
All students were given the same questionnaire. In addition to demographic items and items about specific amounts of debt, students were asked to respond to several items about their spending habits and about what they remember about financial management in their family of origin.

Financial Prudence. Items used to generate this measure were originally developed by Lee, Burr, Beutler, Yorgason, Harker, & Olsen (1997) as a survey instrument to assess various areas of family functioning. In the Lee et al. work, survey respondents were asked to rate each item based on what they experienced in their family of origin. The observed items consisted of family-level measures of which four items were used to measure financial prudence. Those four items were used in the present research. The response scale was altered from a 7-point scale to a 5-point scale, 1=never, 2=seldom, 3=sometimes, 4=usually, 5=always.

Table 2.
Survey Questions

Items	Reliability
Financial prudence	0.82
We saved money.	
We lived within our income.	
We paid our bills on time.	
We were in debt for many things that were not necessary.	
Credit card misuse	0.66
I use my credit card as a convenient way to get a loan.	
I carry a balance on my credit card.	
I have used student loans to pay credit card bills.	
Debt avoidance behaviors	0.65
I buy what I want without considering my budget.	
Before borrowing money, I take extra time to think about it.	
I have tried to minimize my expense to reduce my need for student loans.	
Financial strain	0.84
I worry about the ability to pay back the debt I owe.	
In light of the student loans I owe, I worry about my expected financial condition five years from now.	
I worry about where the money will come from to pay my expenses.	

Other measures. To understand to what degree financial prudence in families affected the behaviors of children once they were in college, nine other items were included. Survey respondents were asked to rate how often these experiences occurred during their lives at present rather than how often they occurred in their family of origin. Each item was constructed to be as simple and direct as possible to cover three constructs other than financial prudence: credit card misuse, debt avoidance behaviors, and financial strain. These items had the same response scale, 1=never, 2=seldom, 3=sometimes, 4=usually, 5=always. Each of the four scales had acceptable loadings in the factor analysis of .5 or above. Each scale exhibited good or acceptable internal consistency as indicated by the Cronbach alpha scores given in Table 2.

Unfortunately existing scales of strain could not be used; both the *Economic Strain Scale* (Hilton et al., 1997) and *Financial Strain* Scale (Aldana and Liljenquist, 1998) are based on respondent strain from existing patterns of financial strain. We were unable to use these measures because our respondents were exiting college students and we were anticipating financial strain based on their life-after-college.

Results

Analysis
The primary purpose of this research was to understand to what degree financial prudence in families affected the behaviors of children once they were in college. Part of this understanding was built upon grouping like behaviors. As such, data in this research were analyzed using AMOS 4.0 to test for factor structures using *confirmatory factor analysis (CFA)* and to estimate to what degree each factor explained variance in other factors—using estimated weights. These weights, for the reader unacquainted with Structural Equation Modeling, are similar to standardized beta coefficient estimates from a single equation using ordinary least squares (OLS) multiple regression analyses.

The variables debt avoidance behaviors and credit card misuse were modeled as mediating variables with financial prudence as the only exogenous independent variable, and financial strain as the dependent variable. It is a mediating model since prudence encourages proactive debt avoidance, which in turn diminishes financial strain. Thus some of the effect of financial prudence on financial strain works indirectly i.e. mediates, through debt avoidance. In a similar manner, financial prudence diminishes financial strain by way of a mediating effect through credit card misuse. These two mediated chain effects represent indirect paths of influence between prudence and strain. The decision to treat debt avoidance behaviors and credit card misuse as mediating variables was based on their temporal location, since financial prudence perceptions were formed on the basis of practices and patterns that were perceived to have occurred in the family of origin at a time prior to early adult years, and debt avoidance and credit misuse constitute practices and patterns formed more recently during early adult years.

None of the observed variables were allowed to cross-load and none of the error terms were allowed to correlate. Model adequacy was measured using the

© 2004, Association for Financial Counseling and Planning Education *All rights of reproduction in any form reserved.*

standard chi-square fit statistic, which is sensitive to sample size (Bollen, 1989), as well as other typical indices of fit: *Comparative Fit Index* (CFI), *Goodness of Fit Index* (GFI), *Adjusted Goodness of Fit Index* (AGFI) and the *Root Mean Square Error of Approximation* (RMSEA). Any of these first three indices above .95 with an RMSEA under .05 is considered a good fit.

Because respondents were asked to describe their family income compared to what they perceived as the national average, a separate model was tested to determine to what extent, if any, parameter estimates would change as the model was applied to respondents with differing levels of family of origin income. Half of the respondents considered their family income to be "average", about one-fourth said "low" and the other fourth said "high." Family income was treated as a moderating variable—that is, the model was tested at the three different income levels to determine if relationships between the variable within the model would change depending on the respondent's level of family of origin income. Theoretically, statistically significant differences in parameter estimates would indicate that the model actually differed for the groups tested. These potential differences could manifest themselves as a different factor structure, different structural relationships, or both (Bollen, 1989).

Using AMOS, the multi-sample model produces a single chi-square for the unconstrained model regardless of the number of groups compared in the analysis. Significant differences in the parameter estimates across groups are tested by holding the structural model invariant across groups. The resulting chi-square can then be compared to the unconstrained chi-square with the difference between the two also being distributed as a chi-square. A statistically significant difference between constrained and unconstrained chi-squares indicates that holding the structural model invariant over the groups has worsened the fit of the model and this would mean that the parameter estimates indeed differed between each of the groups.

Model results

Results of the *confirmatory factor analysis* (CFA) generally indicated that each of the factors grouped the most correct set of observed variables. Of the 13 total observed variables, eleven had standardized factor loadings above .600 (see Table 3). The smallest factor loading was .511 and represented the question, "I have used student loans to pay credit card bills." The highest factor loading was .917 and represented the question, "We lived within our income."

Final Model. Findings for the final model indicated a good fit for the solution. The chi-square was inflated at 73.184 due to the sensitivity of the statistic to sample size. However, the chi-square to degrees of freedom ratio was 1.240. This statistic has been recommended by Hayduk (1996) among others as an acceptable alternative to using the chi-square to assess fit. Ratios less than 2,000 indicate a good fit. The other fit statistics were also well within acceptable ranges. The CFI was .993 with the GFI = .976, AGFI = .963, and RMSEA = .022. Again Hayduk has specifically noted that an AGFI statistic above .950 indicates a close model fit.

Analysis of relationships among the latent variables in the model revealed that prudence, debt avoidance and credit misuse explained thirty two per cent of the variance in financial strain, R^2= .32 (see Figure 2). As expected, the relationship of credit card misuse with financial strain was strongly positive with a standardized regression weight of .61. Financial prudence was negatively related with financial strain with a weight of -.19. However, the relationship between debt avoidance behaviors and financial strain was moderately positive with a standardized regression weight of .30. Although this finding was especially interesting, the other relationships with debt avoidance behaviors were not surprising. Its relationship with credit card misuse was strongly negative (-.55) and slightly positive with financial prudence (.23). Although the relationship between debt avoidance behaviors and financial prudence was modest, financial prudence did predict five percent of the variance in debt avoidance.

As for credit card misuse, the R^2 was .36 with debt avoidance behaviors having the strongest effect. Financial prudence was negatively related to credit card misuse with a standardized regression weight of -.13. But the results here generally implied that credit card misuse results from lack of impulse control. The individual observed items of debt avoidance behaviors were all action oriented toward reducing expenses such as: taking extra time to think about expenses, considering their budget, or efforts to minimize expenses. Results demonstrate that these surrogate variables for impulse control affect both the way college students manage money as well as the financial strain they ultimately experience.

When the model was used to test family income as a moderating variable, the resulting chi-square was 6.255 (12 df, p=.903) indicating that the parameter estimates did not change in a significant way as the structural model was held invariant across the different income groups. This suggests that regardless of family income, respondents still experienced the same issues with credit card abuse and financial strain.

© 2004, Association for Financial Counseling and Planning Education *All rights of reproduction in any form reserved.*

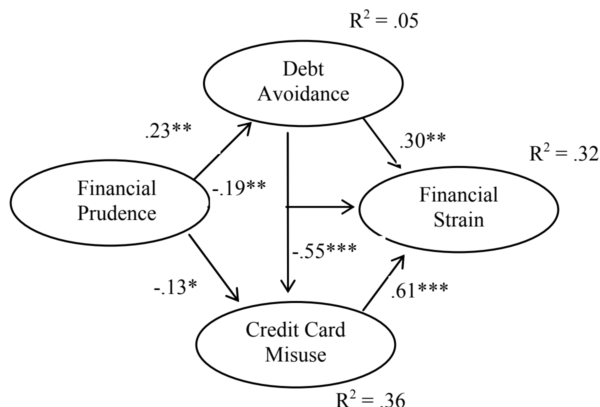
Table 3.
Standardized Factor Loadings from the Final Solution

Items	Loading
Financial Prudence	
We saved money.	.735
We lived within our income.	.917
We paid our bills on time.	.680
We were in debt for many things that were not necessary.	.634
Credit Card Misuse	
I use my credit card as a convenient way to get a loan.	.667
I carry a balance on my credit card.	.747
I have used student loans to pay credit card bills.	.511
Debt Avoidance Behaviors	
I buy what I want without considering my budget.	.527
Before borrowing money, I take extra time to think about it.	.645
I have tried to minimize my expense to reduce my need for student loans.	.689
Financial Strain	
I worry about the ability to pay back the debt I owe.	.866
In light of the student loans I owe, I worry about my expected financial condition five years from now.	.836
I worry about where the money will come from to pay my expenses.	.708

Discussion and Implications

These results provide empirical support for the importance of financial prudence modeled thorough the prosaic routines of everyday home and family life. Students who reported higher frequencies of prudent behaviors in their family of origin tended to experience lower levels of financial strain. Parents are found to have modest but favorable influence on the financial wellbeing of the next generation to the extent that they live with them in prudent ways. Specifically, that parents lived within their income, saved money, paid bills on time, and avoided unnecessary debt. In these simple and everyday ways, parents apparently involved their children in basic disciplines of financial prudence. By the time their children were about to graduate from college, they were a little better prepared to avoid unnecessary debt, limit spending, reduce student loans, avoid purchases made without considering their budget, and take extra time to be thoughtful before borrowing money. These children as young adults were also less inclined to misuse credit, not use their credit card as a convenient way to get loans, not carry a balance on their credit card, and not depend on student loans to payoff credit card bills. Being more prudent, they tended to experience less financial strain and worried less about their expected financial future, their ability to pay back debts, and their need for money to meet current expenses.

Figure 2
Final Model with Standardized Regression Weights
N=482



*p<.05, ** p <.01, *** p <.001

Financial prudence in one generation appears to reduce the level of financial strain in the next. On the one hand, financial prudence increases debt avoidance but instead of reducing strain as was hypothesized, it increases financial strain. But, fortunately, debt avoidance does have a dampening effect on financial strain through a reduced effect on credit card misuse. So, in terms of direct effect, debt avoidance and credit misuse both create financial strain, indicating that some financial worry appears inevitable.

In addition to a direct effect from financial prudence to diminished strain, the findings of this research also provide preliminary evidence for two indirect ways financial prudence helped reduce financial strain in the life of an early adult. These occurred from the effects of prudence through debt avoidance and credit misuse. Being the prudent tend to foster debt avoidance (regression coefficient weight of .23). This created self-imposed financial strain (.30), but it also reduced credit card misuse (-.55). In turn the combined effects of debt avoidance and prudence on credit card misuse reduced financial strain (.61) for an overall net reduction in financial strain.

Findings presented here also have educational implications for adult learners, parents, and grandparents. Adults often feel they lack knowledge of financial details, of changing financial markets, and of high tech financial tools now becoming available in the expanding information age. Yet the findings reported here suggest there is reason for them to feel empowered by what years of experience may have taught them about the value and importance of living in ways that are financially prudent such as: living within their income, paying their bills on time, avoiding unnecessary debt, and consistently saving. This is knowledge that is difficult to obtain and takes time and

© 2004, Association for Financial Counseling and Planning Education *All rights of reproduction in any form reserved.*

experience to fully appreciate, but once obtained has a long "shelf life". This is not to suggest that other avenues of financial education are less important than previously thought; rather it reminds us not to overlook the value of knowledge regarding financial prudence that can be embedded in the prosaic routines of everyday home and family life. Youth may be more likely to connect this experiential learning with what they may learn in more formal educational settings.

Future Research and Study Limitations

Further study is needed to better understand the value of what can be learned through the prosaic routines and practices of family life to enhance financial well-being. This study represents only a beginning in research on financial prudence as one of many possibilities for managing and reducing financial strain. Most previous research focused on aspects of financial strain that have their origin outside the control of individuals and families. Coping strategies become important in dealing with these externally driven strains. This study focuses on internal sources of strain over which the individual and family have more control. More research is needed to identify internal sources of strain and productive strategies for dealing with it. Finally, continued refinement of the scales used in this study is needed. These findings suggest that the variables used have merit, but further research would benefit from more reliable measures. These respondents were all college student seeking financial aid so the results of this study are only applicable to this segment of the population. To derive truly valid conclusions on the potential value of inter-generational research, it is necessary to obtain longitudinal data from respondents representative of the general population.

References

Acock, A.C. & Bengtson, V.I. (1978). On the relative influence of mothers and fathers: A covariance analysis of political and religious socialization. *Journal of Marriage and the Family, 40*, 519-530.

Aldana, S.G. & Liljenquist, W. (1998). Validity and reliability of a financial strain survey. *Association for Financial Counseling and Planning Education, 9*(2), 11-18.

Belk, R.W. (1988). Third world consumer culture. *Research in Marketing 4,* (Suppl.), 103-127.

Blee, K.M. & Tickamyer, A.R. (1995). Racial differences in men's attitudes about women's gender rolls. *Journal of Marriage and the Family, 57*, 21-30.

Bivens, G.E. (1976). Grants economy & study of American family: A possible framework. *Home Economics Research Journal, 5*(2), 70-78.

Boulding, K.E. (1973). *The economics of love and fear: A preface to grants economies.* Belmont, CA: Wadsworth.

Bollen, K. (1989). Structural equations with latent variables. NewYork: John Wiley and Sons.

Catalano, R. (1991). The health effects of economic insecurity. *American Journal of Public Health, 81,* 1148-1152.

Catalano, R. & Dooley, D. (1977). Economic predictors of depressed mood and stressful life events in a metropolitan community. *Journal of Health and Social Behavior, 18,* 292-307.

Cauffman, E. & Steinberg, L. (1995). The impact of employment on adolescent development. *Annals of Child Development 11*, 131-166

Conger, R.D., Elder, G.H., Lorenz, F.O., Conger, K.J., Simons, R.L., Whitbeck, L.B., Huuck, S., & Melby, J.N. (1990). Linking economic hardship to marital quality and instability. *Journal of Marriage and the Family, 52,* 643-656.

Conger, R.D., Conger, K.J., Elder, G.H., Lorenz, F.O., Simons, R.L., & Whitbeck, L.B. (1992). A family process model of economic hardship and adjustment of early adolescent boys. *Child Development, 63,* 526-541.

Conger, R.D., Conger, K.J., Elder, G.H., Jr., Lorenz, F.O., Simons, R.L. & Whitbeck, L.B. (1993). Family economic stress and adjustment of early adolescent boys. *Developmental Psychology, 29,* 206-219.

Conger, R.D., Conger, K.J., & Elder, G.H. (1997). Family economic hardship and adolescent adjustment: Mediating and moderating processes. In G.J. Duncan & J. Brooks-Gunn (Eds.), *Consequences of growing up poor* (pp. 288-310). New York: Russell Sage Foundation.

Conger, R.D., Wallace, L.E., Sun, Y., Simons, R.L., McLoyd, V.C., & Brody, G.H. (2002). Economic pressure in African American families: A replication and extension of the family stress model. *Developmental Psychology, 38*(2), 179-193.

Cunningham, M. (2001). Parental influences on the gendered division of housework. *American Sociological Review, 166*(2), 184-203.

Cunningham, M. (2000). The influence of parental attitudes and behaviors on children's attitudes toward gender and household labor in early adulthood. *Journal of Marriage and Family, 63*, 111-122.

Dew, M.A. & Brome, E.J. (1987). A comparative analysis of two community stressors: Long term mental health effects. *American Journal of Community Psychology, 15,* 167-184.

Droge, C. & McCoy, R.D. (1995). The consumption culture versus environmentalism: Bridging value systems with environmental marketing. In P. Scholder, E. Kaufman, & P. Kaufman (Eds.), *Proceedings of the 1995 Marketing and Public Policy Conference* (227-232). Atlanta, GA.

Gutman, L.M. & Eccles, J.S. (1999). Financial strain, parenting behaviors, and adolescents' achievement: Testing model equivalence between African American and European American single- and two–parent families. *Child Development, 70*(6), 1464-1476.

Hamilton, B.L., Broman, C.L., Hoffman, W.S., & Renner, D.S. (1990). Hard times and vulnerable people: Initial effects of plant closing on autoworkers' mental health. *Journal of Health and Social Behavior, 31*, 123-140.

Hayduk, L. (1996). LISREL issues, debates, and strategies. Baltimore, MD: John Hopkins University Press.

Hilton, J.M. & Devall, E.L. (1997). The family economic strain scale: Development and evaluation of the instrument with single- and two-parent families. *Journal of Family and Economic Issues. 18*(3), 247-269.

Justice, B. & Duncan, D.F. (1977). Child abuse as a work-related problem. *Corrective and Social Psychiatry and Journal of Behavior Technology, Methods, and Therapy, 23*(2), 53-55.

 © 2004, Association for Financial Counseling and Planning Education *All rights of reproduction in any form reserved.*

Kessler, R.D., Turner, B.J. & House, S.J. (1988). Effects of unemployment on health in a community survey: Main, modifying, and mediating effects. *Journal of Social Issues, 44*, 69-85.

Kessler, R.D., Turner, B.J., & House, S.J. (1989). Unemployment, reemployment, and emotional functioning in a community sample. *American Sociological Review, 54*, 648-657.

Lea, S.E.G., Webley, C. M., & Walker, C.M. (1995). Psychological factors in consumer debt: Money management, economic socialization, and credit use. *Journal of Economic Psychology. 16,* 681-701.

Lee, Y.J., Parish, W.L., & Willis, R.J. (1994). Sons, daughters, and intergenerational support in Taiwan. *American Journal of Sociology, 99*(4), 1010-1041.

Lee, T., Burr, W., Beutler, I., Yorgason, F., Harker, B., & Olsen, J. (1997). The family profile II: A self-scored, brief family assessment tool. *Psychological Reports, 81,* 467-477.

Leim, R., & Leim, J.H. (1988). Psychological effects of unemployment on workers and their families. *Journal of Social Issues, 44*, 87-105.

Mills, R.J., Grasmick, H.G., Morgan, C.S., & Wenk, D.A. (1992). The effects of gender, family satisfaction, and economic strain on psychological well-being. *Family Relations, 41,* 440-445.

Pearlin, L.I., Menaghan, E.G., Leiberman, M.A., & Mullan, J.T. (1981). The stress process. *Journal of Health and Social Behavior, 22,* 337-356.

Poduska, B.E. (1995). *For love and money.* Salt Lake City, UT. Deseret Book.

Roberts, J.A., & Jones, E. (2001). Money attitudes, credit card use, and compulsive buying among American college students. *The Journal of Consumer Affairs. 35*(21), 213-240.

Roberts, J.A. & Sepulveda, C.J., (1999). Money attitudes and compulsive buying: an exploratory investigation of the emerging consumer culture in Mexico. *Journal of International Consumer Marketing. 11*, 53-74.

Smith, F.B. (1999). Students and credit cards. *Consumers' Research Magazine, 82*(8), 34-35.

Teo, P., Graham, E., Yeoh, B.S.A., & Levy, S. (2003). Values, change and inter-generational ties between two generations of women in Singapore. *Aging and Society 23,* 327-347.

Thornton, A., Alwin, D.F., & Camburn, D. (1983). Causes and consequences of sex-role attitudes and attitude change. *American Sociological Review, 48,* 211-227.

Voydanoff, P. (1990). Economic distress and family relations: A review of the eighties. *Journal of Marriage and the Family, 52*, 1099-1115.

Vinokur, A.D., Price, R.H., & Caplan, R.D. (1996). Hard times and hurtful partners: How financial strain affects depression and relationship satisfaction of unemployed persons and their spouses. *Journal of Personality and Social Psychology, 71*(1), 166-179.

Williams, E., Radin, N., & Allegro, T. (1992). Sex role attitudes of adolescents reared primarily by their fathers: An 11-year follow-up. *Merrill-Palmer Quarterly.*

Zuckerman, G. (2000, July 5). Borrowing levels reach a record, sparking debate. *The Wall Street Journal,* C1, C18s.

© 2004, Association for Financial Counseling and Planning Education *All rights of reproduction in any form reserved.*