

The impact of family relationships and financial education on financial risk tolerance

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Abstract

This study explores how family relationships and financial education impact financial risk tolerance using a sample of college freshmen and their parents. No significant relationship is found between the financial risk tolerance of parents and their children. However, husbands are significantly more risk tolerant than their wives. There is also a strong correlation between the risk tolerance of the spouses, after controlling for gender, income, and education. In addition, college students who had some financial education in high school are found to be more risk tolerant, especially when they played a stock market game as part of a course. © 2011 Academy of Financial Services. All rights reserved.

JEL classification: A21; D14; I22; J12; J13

Keywords: Risk tolerance; Financial education; Family relationships; Marital relationship; Parent-child differences

1. Introduction

Given its important role in the financial planning and investment processes, financial risk tolerance (FRT) has been the focus of many research papers in recent years. A number of studies have examined the impact of variables such as gender, income level, wealth, education level, age, and type of employment. While these variables have often been shown to have a significant impact on FRT, they only provide a partial explanation of the variance in FRT. There are still a number of variables that may be important determinants of FRT, but have received much less attention.

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The role of financial education in the determination of FRT is one area that has not received much attention. A couple of studies have examined financial knowledge as a determinant of FRT and have found that financial knowledge is associated with increased FRT (Grable, 2000; Grable & Joo, 1997). When combined with research that suggests increased FRT leads to larger wealth accumulation for retirement (e.g., Bajtelsmit, Bernasek, & Jianakoplos, 1999; Hariharan, Chapman, & Domian, 2000; Yuh & DeVaney, 1996), the results point to the potentially significant role of financial education early in a person's life. However, differences in FRT resulting from financial education while an adolescent have yet to be examined.

The impact of family relationships on FRT is another area in which further study is merited. While there is some limited research examining spousal relationships in FRT (e.g., Gilliam, Goetz, & Hampton, 2008; Roszkowski, Delaney, & Cordell, 2004), there do not appear to be any studies that investigate the parent/child relationship. Such relationships may be important factors that a financial planner should consider when advising clients.

This paper explores how high-school financial education and family relationships affect FRT in a sample of new college freshmen and their parents, and the amount of variance explained by these variables above and beyond the variance explained by previously studied variables such as gender, income, and education level.

2. Literature review

2.1. Commonly studied correlates of financial risk tolerance

A fair amount of research has been devoted to gaining an understanding of the factors that impact an individual's FRT. While the methods used to measure FRT have varied widely across studies, many of the results have been consistent. Consider, for example, the research that examines the relationship between gender and FRT. These studies incorporate a variety of FRT measures such as the Survey of Consumer Finances (SCF), different types of investment and insurance decisions, and various survey instruments. Yet, despite diverse methodologies, the research consistently finds that females tend to be more risk averse than males (Bajtelsmit & Bernasek, 1996; Bajtelsmit et al., 1999; Chaulk, Johnson, & Bulcroft, 2003; Embrey & Fox, 1997; Grable, 2000; Grable & Lytton, 1998; Grable, Lytton, & O'Neill, 2004; Hallahan, Faff, & McKenzie, 2004; Hariharan et al., 2000; Hartog, Ferrer-i-Carbonell, & Jonker, 2002; Jianakoplos & Bernasek, 1998; Olsen & Cox, 2001; Powell & Ansic, 1997; Roszkowski & Grable, 2005; Sung & Hanna, 1996; Weber, Blais, & Betz, 2002).

Other commonly studied variables include income, wealth, and education level. The research indicates that financial risk tolerance is positively associated with increased levels of these variables (Chaulk et al., 2003; Finke & Huston, 2003; Grable, 2000; Grable & Lytton, 1998; Grable et al., 2004; Hallahan et al., 2004; Hariharan et al., 2000; Hartog et al., 2002; Sung & Hanna, 1996). Some studies also investigate the relationship between an individual's employment and their financial risk tolerance with the findings showing that self-employed people tend to be more risk tolerant than those employed by others (Grable & Lytton, 1998; Hartog et al., 2002; Sung & Hanna, 1996). Age is another widely studied

variable, but results of that research have been mixed. At least six studies find a negative relationship between age and FRT (Chaulk et al., 2003; Finke & Huston, 2003; Gilliam, Chatterjee, & Zhu, 2010; Hallahan et al., 2004; Morin & Suarez, 1983; Palsson, 1996). One piece of research also shows a curvilinear relationship such that FRT decreases with age up to a point and then begins to increase (Faff, Mulino, & Chai, 2008). In contrast, two studies find a positive association between age and FRT (Grable, 2000; Wang & Hanna, 1997), while three others show a curvilinear relationship where risk tolerance increases with age up to a point and then decreases (Gilliam, Chatterjee, & Grable, 2010; Riley & Chow, 1992; Weagley & Gannon, 1991). In addition, there are four studies that find no significant relationship at all between age and FRT (Grable & Joo, 1997; Grable & Lytton, 1998; Grable et al., 2004; Hariharan et al., 2000). The reason for this inconsistency is not clear, but may be because of differences in both the methodologies used and the sample demographics.

2.2. Financial knowledge and education

Although it has not been examined to the same extent as the variables discussed above, two studies show a strong association between financial knowledge and FRT (Grable, 2000; Grable & Joo, 1997). Both studies use a survey instrument to measure FRT. While it is unclear how Grable (2000) measures financial knowledge, Grable and Joo (1997) use an index created from two survey questions that deal with knowledge of investments and risky situations. The combined results of these studies suggest that financial risk tolerance increases with higher levels of financial knowledge. However, there appears to be no research examining how specific types of financial education (e.g., a course in personal finance) affect FRT.

2.3. Family relationships

Family relationships may also be an important variable in predicting financial risk tolerance, but there has been very little research in this area to date. While there is some literature on the impact of spousal relationships, there is a paucity of research examining the importance of parent-child relationships.

2.3.1. Spousal relationships

Results are mixed from the research that has examined the impact of marital status on financial risk tolerance. Two studies find married individuals are more risk tolerant than non-married individuals (Grable, 2000; Grable & Lytton, 1998), one study finds they are more risk averse (Hallahan et al., 2004), and one finds no significant relationship between marital status and risk tolerance (Grable et al., 2004). Another study compares baby boomers born during the first five years of their generation (i.e., leading boomers) with those born in the last five years (i.e., trailing boomers) and finds that being married is negatively associated with risk tolerance for the leading boomers, but positively associated with risk tolerance for the trailing boomers (Gilliam, Chatterjee, & Zhu, 2010). However, none of the studies address the actual relationship between spouses.

Hanna and Lindamood (2005) examine differences between husbands and wives respond-

ing to the SCF, where the more financially responsible spouse in the household is presumably the respondent. The researchers find that wives are generally much less willing to take on risk than husbands, and that each group is affected in a similar way by factors such as age and education. While Hanna and Lindamood (2005) find differences in the financial risk tolerance of husbands and wives who are not married to each other, there is also evidence that spouses within married couples tend to have different risk tolerances (Gilliam et al., 2008; Mazzocco, 2004; Roszkowski et al., 2004). For example, Mazzocco (2004) notes that over 50% of the couples responding to the Health and Retirement Study have dissimilar risk tolerances as measured by their willingness to gamble over future income, with wives tending to be more risk averse. He demonstrates how the spousal risk tolerances interact to affect the savings patterns of married couples sharing decision making as compared with households where there is only one decision maker. These results are consistent with a previous study by Sung and Hanna (1998). Although they do not examine the interaction of spousal risk tolerance, the investigators use data from the SCF to show that one spouse's decision to participate in retirement plans and to invest most of those funds in stocks has a significant positive relationship to the other spouse's decision to do the same.

Roszkowski et al. (2004) also find that wives are significantly more risk averse than their husbands, but the results are mixed in regard to the influence of one spouse's risk tolerance on the other's. Initially, the researchers find no significant relationship in spousal risk tolerance. They then find a moderate correlation in a retest 45 days later. The reason for this difference is not clear, but the researchers suggest that discussion between the spouses after the first administration of the instrument may have been a factor. Overall, the research on spousal risk tolerance to date indicates that wives tend to be more risk averse than their husbands and spousal risk tolerances may interact to affect savings and investment behavior. However, the research is limited, particularly in regard to the relationship between spousal risk tolerances, and more study in this area is merited.

2.3.2. Parent-child relationships

There appears to be no research that has examined the relationship between parent and child financial risk tolerance. However, there is literature that suggests the consumer and financial attitudes and behavior of parents may have an influence on their children. For example, it has been shown that parental communication is associated with college students' attitudes toward advertising (Bush, Smith, & Martin, 1999), and that parents have a significant influence on the purchase intentions and behaviors of their teenage children (Martin & Bush, 2000). In a large sample of Dutch families, Webley and Nyhus (2006) also find that the parent's economic socialization in childhood (i.e., being encouraged to have a bank account, having earned or been given money when a teenager, and having discussed financial affairs with parents) is associated with a preference for saving rather than spending money that is left over after having paid for necessities. In addition, their results indicate the amount of savings of the children is positively associated with the amount their parents save.

The relationship between parents and children in regard to financial matters is further highlighted in results of the 2001 Parents, Youth and Money Survey (American Education Savings Council & Employee Benefit Research Institute, 2001). Of the 1,000 parents and children surveyed, 94% of the students indicate they turn to their parents for financial

information, 95% of the parents say they encourage their child to save money, 86% teach their child to compare prices, and 61% teach their child to set financial goals and involve him or her in discussions of family financial matters. Interestingly, mothers are more likely than the fathers to report having discussions about job prospects, paying for education, family financial matters, setting goals and tracking expenses. However, fathers are more likely than mothers to teach their children about different kinds of investments. Taken as a whole, the literature suggests that the financial attitudes and behavior of parents has at least some influence on the attitudes and behaviors of their children.

3. Study objectives

The objectives of the current study are to examine: (1) how parents impact the FRT of their college age children through their education of the children and through their own FRT, (2) the relationship between the risk tolerance of spouses, (3) how financial education obtained in high school affects FRT, and (4) the significance of the family relationships and financial education when combined with other variables shown to be significant from prior research (e.g., gender, income, and education level).

4. Methodology

4.1. Sample

Data were collected from a sample of incoming college freshmen and their parents attending summer orientation sessions at a public university. Responses to a paper and pencil survey instrument were received from 378 incoming freshmen (43% male and 57% female), 118 fathers, and 177 mothers. Descriptive statistics for the student and parent samples are presented in Panel A and Panel B of Table 1, respectively. The mean self-reported high school grade point average of the incoming freshmen was 3.14 and their mean estimate of their parents combined income was in the range of \$60,000 to \$80,000. The majority of the respondents were white in both the student sample (86.8%) and the parent sample (89.6%). Only three of the students indicated they were married. The majority of the respondents in the parent sample indicated they were married ($n = 260$). Within the group of married parents, 101 were married couples (202 total respondents) and 58 were married parents attending without their spouse. Approximately 64% of the parents had an associate's degree or higher and the mean of their estimated combined spousal income was in the range of \$80,000-\$100,000.

4.2. Procedure

Each parent and student independently responded to an instrument that included a measure of FRT as well as a number of demographic questions. FRT was measured using the Grable and Lytton (1999) thirteen-item scale. It has been shown to be a better measure than the

Table 1 Sample descriptive statistics

| Panel A: Student sample variable | <i>N</i> | % | <i>M</i> | <i>SD</i> |
|----------------------------------|----------|-------|----------|-----------|
| High school GPA | 323 | | 3.14 | 0.434 |
| Gender | | | | |
| Male | 163 | 42.9% | | |
| Female | 215 | 57.1% | | |
| Race | | | | |
| White | 328 | 86.8% | | |
| Black | 12 | 3.2% | | |
| Hispanic-American | 17 | 4.5% | | |
| Other | 13 | 3.4% | | |
| No response | 8 | 2.1% | | |
| Total married individuals | 3 | 0.8% | | |
| Estimated income* | | | | |
| Less than 20,000 | 15 | 4.0% | | |
| 20,000–39,999 | 35 | 9.3% | | |
| 40,000–59,999 | 76 | 20.1% | | |
| 60,000–79,999 | 80 | 21.2% | | |
| 80,000–99,999 | 58 | 15.3% | | |
| Over 100,000 | 92 | 24.3% | | |
| No response | 22 | 5.8% | | |
| Panel B: Parent sample variable | <i>N</i> | % | | |
| Gender | | | | |
| Male | 118 | 40.0% | | |
| Female | 177 | 60.0% | | |
| Race | | | | |
| White | 266 | 89.6% | | |
| Black | 17 | 5.7% | | |
| Hispanic-American | 7 | 2.3% | | |
| Other | 5 | 1.7% | | |
| No response | 2 | 0.7% | | |
| Total married individuals | 260 | 87.5% | | |
| Married couples | 101 | 68.0% | | |
| Education level | | | | |
| No degree | 3 | 1.0% | | |
| High school | 103 | 34.7% | | |
| Associate | 65 | 21.9% | | |
| Bachelor | 79 | 26.6% | | |
| Masters | 40 | 13.5% | | |
| Doctorate | 6 | 2.0% | | |
| No response | 1 | 0.3% | | |
| Estimated income* | | | | |
| Less than 20,000 | 7 | 2.4% | | |
| 20,000–39,999 | 13 | 4.4% | | |
| 40,000–59,999 | 28 | 9.4% | | |
| 60,000–79,999 | 40 | 13.5% | | |
| 80,000–99,999 | 60 | 20.2% | | |
| Over 100,000 | 137 | 46.1% | | |
| No response | 12 | 4.0% | | |

* The students were asked to estimate the combined income of their parents from all sources, before taxes. The parents were asked to estimate the total combined spousal income from all sources, before taxes.

single Survey of Consumer Finances (SCF) FRT question and has been demonstrated to be both reliable and valid in several studies (Gilliam, Chatterjee, & Grable, 2010; Grable & Lytton, 1999, 2001, 2003).

In another part of the instrument, participants responded to a number of demographic questions. These responses are used as independent variables in the various analyses conducted. For example, both the parents and the students were asked to estimate the combined income of the parents using a scale that was broken into \$20,000 increments. The parents also indicated the highest level of education they had completed, while the students were asked what their high school GPA was. Most students responded with a specific numerical value. However, some students provided letter grades that were converted by the researcher to a numeric value using a standard 4.0 scale.

In addition to the basic demographic questions (e.g., gender, income, and GPA), the students responded to two other items. One question asked the students how much time their parents had spent teaching them about personal finance and money matters. The response options included: (1) no time at all, (2) very little time, (3) some time, (4) a fair amount of time, and (5) a significant amount of time. The responses to this question and the FRT scores of the parents are used to assess the impact of parent related variables on the students' FRT. Another question asked the students to check off boxes indicating which of the following courses they had taken in high school: an entire course in money management or personal finance, a portion of a course where at least a week was focused on money management or personal finance, an entire course in economics, a portion of a course where at least a week was focused on economics, and a course in which they played a stock market game. These responses are used to assess the impact of financial education on the students' FRT.

5. Results

5.1. *New college freshmen*

Bivariate correlations for the student variables are presented in Table 2. Consistent with prior research, both gender and income are significantly correlated with FRT at the 0.01 level, with males showing higher risk tolerance scores than females. Most of the education variables are also significantly correlated with FRT. Completion of an entire course in personal finance and playing a stock market game as part of a high school course are positively correlated at the 0.01 significance level. Completion of an entire course in economics is also significant at the 0.05 level. However, FRT is not significantly correlated with taking a course that spent only some time on personal financial planning (PFP) or economics. Interestingly, GPA has a significant inverse relationship with FRT. This negative association may be at least partially due to significant correlation between gender and GPA, where females report higher GPAs. Because females have lower risk tolerances than males and report higher GPAs, it follows that GPA may be inversely related to FRT.

In contrast to the education variables, the parental relationships appear to have very little connection to student FRT. Neither the fathers' FRT or the mothers' FRT appear to be correlated with the students' FRT. There is also only a weak association between student

Table 2 Pearson bivariate correlations for student variables

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|-------------------------------|--------------|--------------|------------|------------|-------------|-------------|------------|-------------|------------|------------|------------|
| 1. Financial risk tolerance | — | | | | | | | | | | |
| 2. Gender | -.36** (338) | — | | | | | | | | | |
| 3. Income | .24** (323) | -.20** (355) | — | | | | | | | | |
| 4. GPA | -.19** (290) | .26** (322) | -.02 (305) | — | | | | | | | |
| 5. Partial PFP course | -.02 (337) | -.10 (375) | .01 (354) | .05 (323) | — | | | | | | |
| 6. Full PFP course | .17** (337) | -.12* (375) | .07 (354) | -.06 (323) | -.12* (377) | — | | | | | |
| 7. Partial econ course | .00 (337) | .02 (375) | .01 (354) | .04 (323) | .14** (377) | -.08 (377) | — | | | | |
| 8. Full econ course | .12* (337) | -.11* (375) | .06 (354) | .04 (323) | .06 (377) | .11* (377) | -.08 (377) | — | | | |
| 9. Stock market game | .21** (337) | -.09 (375) | .02 (354) | .11* (323) | .10 (377) | .15** (377) | .03 (377) | .32** (377) | — | | |
| 10. Time taught PFP by parent | .06 (338) | .00 (376) | .10 (355) | .06 (321) | .00 (375) | .22** (375) | .07 (375) | .07 (375) | .13* (375) | — | |
| 11. Father risk tolerance | .05 (97) | .14 (109) | .02 (104) | -.05 (89) | -.14 (108) | .07 (108) | .14 (108) | .10 (108) | .18 (108) | -.09 (108) | — |
| 12. Mother risk tolerance | .16 (136) | -.08 (152) | .11 (146) | -.12 (122) | .12 (151) | .00 (151) | .03 (151) | -.02 (151) | .17* (151) | .07 (152) | .29** (88) |

n is shown in parentheses.

p* < .05, two tailed; *p* < .01, two tailed.

Table 3 Hierarchical regression of student financial risk tolerance

| Step | Overall model | | | Predictor variable standardized β (p value) | | | | | | | | | | |
|------|----------------|--------------------|--------|--|-----------|-------------|------------|-----------|-----------|------------|------------|------------|------------|-----------|
| | R ² | Adj R ² | F Stat | GEN | INC | GPA | PART PFP | FULL PFP | PART ECON | FULL ECON | STK MKT | PRNT TIME | FAT FRT | MOT FRT |
| 1 | .20 | .17 | 7.00 | -.30 (.03) | .22 (.11) | | | | | | | | | |
| 2 | .45 | .37 | 5.16 | -.32 (.03) | .20 (.12) | -.038 (.73) | -.25 (.04) | .04 (.70) | .29 (.01) | -.08 (.50) | .39 (.001) | | | |
| 3 | .48 | .36 | 3.90 | -.31 (.03) | .19 (.15) | -.04 (.75) | -.26 (.03) | .07 (.54) | .32 (.01) | -.05 (.68) | .37 (.003) | -.10 (.43) | -.12 (.35) | .16 (.20) |

GEN = Student Gender, INC = Student estimate of their parent's combined income, GPA = Student self-reported high school GPA, PART PFP = Completed a high school course where at least one week was devoted to personal finance or money management, FULL PFP = Completed an entire high school course in personal finance or money management, PART ECON = Completed a high school course where at least one week was focused on economics, STK MKT = Completed a course in high school in which a stock market game was played, PRNT TIME = Amount of time student estimates parent spent teaching him or her about personal finance or money matters, FAT FRT = The financial risk tolerance of the student's father, MOT FRT = The financial risk tolerance of the student's mother.

FRT and the time parents spent teaching them about personal finance. However, the time parents spent teaching their child about personal finance is significantly correlated with the child taking a PFP course in high school, which in turn, is significantly correlated with student FRT. In addition, there are several other interesting relationships revealed by the correlations. Female students estimate their parents' income to be lower, while the males appear more likely to complete an entire PFP or economics course. There is also a significant correlation between taking the courses and playing a stock market game, presumably because the stock market game is played in those courses.

In addition to the correlation analysis, a hierarchical regression was performed to determine the unique contribution of each set of variables (see Table 3). Gender and income are entered as control variables in the first step, followed by the education variables in the second step, and then the parent related variables in the last step. The results indicate the first level of the model is statistically significant ($p = 0.002$), with gender serving as a better predictor than income. The introduction of the education variables in the second step of the regression leads to a large increase in the variance explained ($R^2_{\Delta} = 0.25$, $p = 0.001$), with participation in a stock market game contributing the most, followed by a course where some economics was covered, and then gender. Interestingly, there is a negative relationship between FRT and having received some PFP education as part of a high school course. As discussed earlier, the correlation analysis does not indicate any significant relationship between FRT and having taken a high school course that covered some economics or PFP. The correlation analysis does indicate a significant relationship between FRT and completion of an entire PFP course or an entire economics course, but those variables are not significant in the regression analysis. Consistent with the correlation analysis, the parent related variables (i.e., time the parent spent teaching the child about personal finance, the father's FRT, and the mother's FRT) do not provide any significant contribution when added in the third step of the regression.

5.2. Parents

The data collected from the parents was analyzed in a manner similar to that of their children. Bivariate correlations for the parent variables are presented in Table 4. Consistent with the student sample and prior research, females are more risk averse than males and

Table 4 Pearson bivariate correlations for parent variables

| | 1 | 2 | 3 | 4 |
|--------------------------------------|--------------|--------------|-------------|-----------|
| 1. Financial risk tolerance | — | | | |
| 2. Gender | -.21** (270) | — | | |
| 3. Education | .16* (272) | -.07 (294) | — | |
| 4. Income | .07 (261) | -.18** (283) | .32** (284) | — |
| 5. Spouse's financial risk tolerance | .23** (176) | .21** (185) | .10 (186) | .00 (176) |

n is shown in parentheses.

p* < .05, two tailed; *p* < .01, two tailed.

gender is significantly correlated with FRT at the 0.01 level. There is also a significant positive relationship between FRT and education level ($p < 0.05$). Contrary to prior research, income level has only a weak positive association with FRT. In the main variable of interest, spousal FRT, the results indicate a significant correlation between the risk tolerance scores of spouses at the 0.01 level. Two additional observations are also worth noting. First, there is a logical positive association between education level and income level ($p < 0.01$). Second, as found in the student sample, the females' estimates of combined parental income is lower than the males' estimates ($p < 0.01$). To examine this relationship further, a paired *t*-test comparing the income estimates of the married spouses was conducted. The results indicate that the husbands tend to estimate higher combined spousal income than their wives, but that difference is only marginally significant (mean difference = 0.14, $t = 1.81$, $p = 0.07$).

Results from the hierarchical regression are shown in Table 5. Gender, education, and income are entered in the first step as control variables and the model is statistically significant ($p = 0.004$). Both gender and education are strong predictors of FRT, but the income level is not. In other words, males are more risk tolerant than females, FRT increases with education level, and income level has very little impact on FRT. Addition of spousal financial risk tolerance in the second step of the regression leads to an increase in the variance explained ($R^2_{\Delta} = 0.05$, $p < 0.001$) and indicates that one spouse's FRT is a strong predictor of the other spouse's FRT ($p = 0.002$). Paired *t*-tests were also performed on the married couples in the sample and the results show a significant difference in their FRT scores (mean difference = 1.90, $t = -3.31$, $p = 0.001$). Thus, the paired *t*-tests indicate the husbands and wives have significantly different FRT scores, but the regression and correlation analyses show their scores are also significantly correlated with one another.

Table 5 Hierarchical regression of parent financial risk tolerance

| Step | Overall model | | | Predictor variable standardized β (<i>p</i> value) | | | |
|------|---------------|-----------|---------------|---|-----------|-----------|------------|
| | R^2 | Adj R^2 | <i>F</i> Stat | Gender | Education | Income | Spouse FRT |
| 1 | .08 | .06 | 4.62 | -.21 (.01) | .19 (.03) | .00 (.97) | |
| 2 | .13 | .11 | 6.05 | -.26 (.001) | .16 (.06) | .01 (.90) | .24 (.002) |

Education = Highest education level achieved by the parent, Income = Parent estimate of their spousal combined income, Spouse FRT = The financial risk tolerance of the parent's spouse.

6. Conclusion

A variety of studies demonstrate a strong association between FRT and demographic variables such as gender, income, and education level. This paper builds upon the existing research by examining how family relationships and financial education affect FRT in a sample of new college freshmen and their parents. Consistent with prior research, the current study finds that gender is an important predictor of FRT. The males display higher risk tolerance levels in both the college student and parent samples. However, the results are mixed for income level. In line with prior research, correlation analysis indicates a strong association between students' FRT and their estimates of their parents' income. A regression analysis further indicates the income variable makes a marginal contribution to the students' FRT when entered with a number of other predictor variables. Contrary to prior research, there is no significant relationship between income level and FRT among the parents. However, consistent with prior research, the education level of the parents is a significant predictor of their FRT.

No significant relationship is found between the FRT of college freshmen and their parents. The amount of time the students report that their parents had spent teaching them about financial matters also does not appear to impact their FRT. However, some formal financial education as part of a high school curriculum appears to increase FRT, particularly when the coursework includes a stock market game. Given that prior research suggests the retirement portfolios of more risk tolerant individuals outperform portfolios of those who are less risk tolerant (e.g., Bajtelsmit et al., 1999; Hariharan et al., 2000; Yuh & DeVaney, 1996), these results point to the importance of financial education while in high school or college. Future research might examine what specific aspects of financial education are most important in determining FRT.

In the parent sample, there is a strong correlation between the FRT of spouses, despite the fact that their FRT scores are significantly different. While husbands tend to be more risk tolerant than their wives, the FRT of one spouse is at the same time a strong predictor of the FRT of the other spouse. One possible reason for this result is that people naturally seek out mates that have a similar risk tolerance. It is also possible that risk tolerance begins to converge as couples spend more time together. When planning for couples, advisors should understand that while the husband tends to be significantly more risk tolerant than the wife, there is also a strong correlation between their FRT. Further research might help us understand if people seek out mates that have similar risk tolerances or if spousal FRT converges over time.

Acknowledgments

The author gratefully acknowledges the assistance of Dr. Michele Matherly, Dr. Richard Silkoff, and Ms. Kathleen Galipeau. The author would also like to thank two anonymous referees for their helpful comments.

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