

# Family Communication, Privacy Orientation, & Financial Literacy: A Survey of U.S. College Students

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Abstract: Increasing personal financial responsibility has increased the value of financial literacy in recent decades, leading to an emphasis on financial literacy and educational programs. However, these educational efforts have demonstrated mixed results, necessitating further research regarding the influences on personal financial knowledge and capabilities. The present study explores the effect of family socialization, specifically through an analysis of family communication patterns and privacy orientations, hypothesizing that open dialogue regarding financial matters will encourage transmission of knowledge and a willingness to seek information when needed. Reporting on the results of an online survey of college students, the results imply that individuals from more communicative families report stronger financial literacy. This finding suggests that financial literacy education programs might be more pedagogically useful if they incorporate and facilitate conversation around financial matters. The findings also reinforce the necessity of financial education.

Keywords: financial literacy; financial knowledge; family communication patterns; communication privacy management; financial education



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## 1. Introduction

Financial literacy has become a pressing concern of governments, educators, and individuals as people are now required to play an ever-larger role in their personal financial well-being (Campbell et al. 2011; Lusardi and Mitchell 2014). In the United States, households face complex decisions regarding both debt, in the form of credit cards and mortgages, and retirement, in the form of defined contribution plans and the choice of when to claim retirement benefits, including Social Security (Campbell 2006; Ryan et al. 2011; Hauff et al. 2020; Yeh 2022). Therefore, the value of financial literacy only continues to grow.

Despite the acknowledged importance of financial literacy, assessments of general knowledge and capability almost invariably report poor understanding of finance and markets (Lusardi 2015; Stolper and Walter 2017). In particular, young adults demonstrate low financial literacy (Chen and Volpe 1998; Mandell 2008; Brau et al. 2019; Brugiavini et al. 2020). Furthermore, this lack of financial knowledge has been linked to poor financial decisions (Hilgert et al. 2003).

Given the mismatch between the value and level of financial literacy, efforts in financial education have been promoted as a means to improve welfare and economic well-being (e.g., Alsemgeest 2015). There is some evidence of the effectiveness of education, since business students tend to score better on measures of financial knowledge than nonbusiness majors (Hanson and Kalthoff 2019; Hanson and Olson 2018; Oehler et al. 2018). However, educational efforts have been largely ineffective in either improving knowledge or changing behavior (Mandell and Klein 2009; Willis 2009; Fernandes et al. 2014; Stolper and Walter 2017). There is some evidence of an impact of education (Collins and O'Rourke 2010), but the overall effect sizes have been weak and the results mixed (Miller et al. 2014).

Improving the effectiveness of financial education is a widely-shared goal, including by the Financial Literacy and Education Commission of the U.S. Department of the Treasury with its mandate to improve financial literacy through educational programs. A general awareness of financial issues such as saving for retirement often begins to develop in the late teen years, as demonstrated by interviews with college students (Koposko and Hershey 2015). This developmental stage stresses the importance of early interventions and education. However, prior research has consistently shown that a person's family plays a substantial role in financial knowledge (Shim et al. 2010), and parents can serve as a positive source of financial knowledge and socialization for young adults (Mimura et al. 2015). Furthermore, training not just individuals but also family units has been shown to have a larger impact on financial literacy and behaviors (Doi et al. 2014). Therefore, knowledge, conversation, and communication within families can play a substantial role in determining financial literacy.

However, knowledge transmission through conversations presupposes a family culture that includes openness to discussions of financial topics. A useful theory for describing a family's openness is Communication Privacy Management (CPM; Petronio 2002). In Petronio's conceptualization of privacy, a family tacitly or explicitly sets rules and boundaries for sharing of information, which leads to a default or consistent attitude toward privacy. This routine is generally referred to in the communication studies literature as the family's privacy orientation.

The present article reports on a survey of college students regarding their family communication patterns, family privacy orientation, and financial literacy. This interdisciplinary research expands on prior work demonstrating the importance of family socialization and communication on financial literacy among college students (Shim et al. 2010; Hanson and Olson 2018), and the results add to a growing literature regarding the role of family communication in financial literacy of young adults. The next section briefly reports on the related literature from communication studies, financial literacy, and related factors. The subsequent sections present the survey's methods and findings before closing with a discussion of implications for financial education efforts and future research.

# 2. Literature Review

Research regularly reports low financial literacy among college students and adolescents (Chen and Volpe 1998; Mandell 2008; Goyal and Kumar 2021; Goyal et al. 2021). Females, economically disadvantaged students, and minorities generally score below other groups in measures of financial knowledge (Arellano et al. 2018; Cameron et al. 2014; West and Worthington 2018). However, surveys of young adults show an eagerness and interest to learn more about finance, and financial education is often touted as one means to empower individuals to make better financial decisions (Salinas and Hidrowoh 2018; Totenhagen et al. 2015). One challenge in the effort to improve financial literacy is that the development of financial knowledge and skills is multi-faceted.

Shim et al. (2010) posit that financial socialization occurs through three principal channels: work, school, and family. Thus, parental involvement can play an important role in financial socialization to help students gain financial knowledge and capabilities (Van Campenhout 2015). Additionally, family background variables such as parental schooling attainment, socioeconomic status as a child, and employment prior to age 15 have been used as instruments for family financial literacy in prior work (Behrman et al. 2012). Furthermore, qualitative interviews demonstrate that young adults rely on parental advice and examples when making decisions regarding saving for retirement (Robertson-Rose 2020).

Family communication patterns can be conceived on a two-dimensional scale of conformity and conversation using the revised family communication pattern instrument (RFCP; Ritchie and Fitzpatrick 1990). Higher scores on the conformity scale imply a greater concern with homogeneity and traditional values, while higher scores on the conversation scale suggest greater openness to discussion and diversity in opinion. These two dimensions define four family types (Fitzpatrick and Ritchie 1994; Koerner and Fitzpatrick 2002). First, *consensual* families score high on both dimensions and struggle to balance dialogue with a desire for consensus. Second, *pluralistic* families score low on conformity

but high on conversation, which implies a more open sharing of ideas and opinions with less parental control. Third, *protective* families are characterized by low conversation and high conformity scores, suggesting that communication is less valued than obedience and hierarchy. Fourth, *laissez faire* families score low on both dimensions and generally exhibit less connection and interaction among family members and an emphasis on independence.

Previous work has established a relationship between family communication patterns and financial literacy based on the original conception of the RFCP (Hanson and Olson 2018). Families with strong conversation orientation and low conformity orientation (pluralistic families) are more likely to influence the financial behavior of young adults (Moschis et al. 1986; Carlson et al. 1990). Furthermore, a family environment with a stronger conversation orientation is more conducive to financial conversations generally (Thorson and Kranstuber Horstman 2014).

However, Ritchie and Fitzpatrick's (1990) survey of conformity orientation has recently been criticized for a negatively-biased operationalization that emphasizes parental control, child obedience, lack of discussion, and conflict avoidance. This perspective has been challenged by work in family communication that recasts conformity as comprising both warm and cold dimensions (Hesse et al. 2017). A more formal reconceptualization expanded the conformity scale to encompass four dimensions: respecting parental authority (RPA), experiencing parental control (EPC), adopting parents' values/beliefs (APV), and questioning parents' values/beliefs (QPB; Kranstuber Horstman et al. 2018). This extended scale using four dimensions is referred to by its originators as the Expanded Conformity Orientation Scale (ECOS). This complication in the measurement of family communication patterns is one motivation for the current study, which builds on similar work by Hanson and Olson (2018) in relating family communication styles and financial literacy among college students.

Petronio (2002) developed Communication Privacy Management (CPM) theory around a metaphor of ownership and control of information. Disclosures occur within a system of rules related to information ownership, linkages, and boundaries, with subsequent turbulence if the rules are violated. For a family unit, information that is shared in common leads to the development of consistent rules regarding the sharing of information within the family (interior orientation) and with individuals outside the family (exterior orientation). These rules can be either tacit or explicitly developed within the family. Furthermore, these rules can differ in the amount of conversation, privacy, and sharing of information that is considered appropriate within the family (interior orientation rules) or outside the family (exterior orientation rules). In particular, financial information might be openly shared and discussed within a family, with outsiders, with both, or with neither. A family's privacy orientation interacts with its preferred communication pattern in determining the transmission of financial knowledge.

### Hypotheses

The principal assumption underlying the present research is that family socialization can increase financial literacy among young adults. This hypothesis does not require that the parents possess a certain level of financial resources or literacy themselves, since the family could also serve as a negative example. The key idea is that learning takes place through conversation, and a secondary factor is that openness to communication about finances will encourage young adults to seek information or advice from additional sources. Therefore, the study proposes the following hypotheses:

- 1. Respondents from pluralistic families will report more financial knowledge than those from protective families.
- 2. Respondents who report higher scores on an interior privacy orientation measure will also report stronger financial knowledge.
- 3. Financial knowledge will be positively correlated with conversation orientation, interior privacy orientation, financial experience, and financial confidence, while being negatively correlated with conformity orientation.

Exterior privacy orientation is explored as a non-directional research question regarding its influence on financial literacy. Additionally, the sub-dimensions of the ECOS are explored for different correlations with financial knowledge.

Furthermore, the directionality of a number of control variables can be anticipated. Coursework in finance (including experience with stock market simulations), college major in a business discipline, greater parental and personal income, a parent who works in the financial field, and report of a childhood allowance can all plausibly be expected to have a positive effect on financial literacy, though these are not the primary variables of interest in the present study. Previous literature also suggests a persistent gender gap of men outscoring women on measures of financial literacy (Hogarth and Hilgert 2002; Lusardi and Mitchell 2008), but this finding is not always statistically significant (e.g., Hanson and Olson 2018).

## 3. Materials and Methods

This investigation employed a range of previously developed survey scales. The data were collected in an anonymous online survey using Qualtrics between September and December 2021, and the survey included informed consent before participation in the study. Prior to any recruitment of participants or data collection, the research protocol was approved by a university institutional review board (IRB).

## 3.1. Participants

A volunteer sample of 214 college students completed the entire online survey with a median completion time of approximately 15 min. All respondents self-identified as currently enrolled, full-time students between the ages of 18 and 26. An additional 21 individuals completed some portion of the survey but failed to provide sufficient information for inclusion in the final analysis, which represents an attrition rate of approximately 10%. Demographic characteristics of the sample appear in Table 1, which reveals the group to be largely female and predominantly Caucasian. Approximately half of the students attend a small, private college or university, with another substantial group reporting attendance at a large public college or university. Just more than one-third of the sample are business majors, and most respondents grew up and attend college in the eastern half of the United States.

Additionally, receipt of a cash allowance was reported by 90 of the respondents. Of that subset, 59 students (66% of the subsample) described the allowance as explicitly tied to completion of chores. Responses regarding the weekly payment amount ranged widely, with 65 responses of less than \$20, another 19 between \$20 and \$40, and 6 responses of more than \$40.

Summaries of family characteristics are presented in Table 2. The sample is drawn largely from traditional families with two parents or guardians, and a substantial plurality have one sibling. The parental income figures show that the respondents were generally raised in middle class or affluent families, though nearly 16% of the students reported not knowing the annual income of their parents.

Overall, the volunteer nature of the sample and the sample size limit the scope of generalization of the findings. However, the sample does represent a range of different colleges, different regions of the country, and a diversity of both majors and parental income. The sample size is adequate to conduct factor analysis on the various survey scales, and any findings are at least suggestive of the experiences of U.S. college students.

 Table 1. Demographic characteristics.

Variable	Categories	n	%
Age	18–20	63	29.4
	21–23	128	59.8
	24–26	23	10.7
	Male	81	37.9
Sex	Female	131	61.2
	Prefer not to answer	2	0.9
	White	169	79.0
	African American	15	7.0
TD.	Asian	4	1.9
Race	Hispanic	16	7.5
	Native American	8	3.7
	Prefer not to answer	2	1.0
	Community college	3	1.4
	Small public college	15	7.0
College type	Large public college	85	39.7
	Small private college	108	50.5
	Large private college	3	1.4
A cadamia major	Business	78	36.4
Academic major	Other	136	63.6
	Northeast	36	16.8
	Midwest/Great Lakes	129	60.3
Childhood rogion	Southeast	40	18.7
Childhood region	Southwest	2	1.0
	Western coastal states	6	2.8
	Western mountain states	1	0.5
College region	Northeast	31	14.5
	Midwest/Great Lakes	147	68.7
	Southeast	35	16.4
	Southwest	1	0.5

 Table 2. Family characteristics.

Variable	Categories	n	%
	None	17	7.9
	One	94	43.9
Number of siblings	Two	63	29.4
Number of siblings	Three	28	13.1
	Four	6	2.8
	More than four	6	2.8
	Two parents or guardians	185	86.4
Family type	One female parent or guardian	22	10.3
Family type	One male parent or guardian	5	2.3
	Other	2	0.9
	\$0-50,000	17	7.9
	\$50,001–75,000	35	16.4
	\$75,001–100,000	21	9.8
Parental income	\$100,001–250,000	61	28.5
	More than \$250,000	38	17.8
	Do not know	34	15.9
	Prefer not to answer	8	3.7
	\$0–10,000	147	68.7
Personal income	\$10,001–30,000	48	22.4
	\$30,001–50,000	3	1.4
	More than \$50,000	3	1.4
	Prefer not to answer	13	6.1

#### 3.2. Procedures

The volunteer, convenience sample was contacted through broad distribution of an invitation to participate. Recruitment efforts were conducted in multiple ways. Students enrolled at three universities were contacted directly through general email listservs with additional follow-up messages from several cooperating professors, some of whom offered extra credit for participation. Announcements were also made through social media accounts. All formats included a website link that provided anonymous access to the online survey.

The survey began with an explanation of the study, and students were provided with contact information for further questions or concerns regarding the survey. Before completing the survey, respondents provided consent and confirmed eligibility. After completing the survey, respondents had the option to provide contact information for one of three \$20 gift cards as incentive for participation; this personal information was collected through a separate survey to maintain anonymity of survey responses.

#### 3.3. Measures

Measuring financial literacy with psychometrically valid and reliable scales has been a challenge for researchers (Huston 2010; Warmath and Zimmerman 2019). Most studies employ questions related to financial knowledge (e.g., Lusardi 2015; Lusardi and Tufano 2015), but these surveys may lack content validity for the construct of financial literacy by omitting consideration of confidence and subjective financial knowledge (Xiao et al. 2014; Allgood and Walstad 2016). Therefore, the present study utilizes three measures: financial knowledge, financial confidence, and financial experience.

First, the survey measures financial knowledge with Knoll and Houts's (2012) 26-item scale that encompasses 15 multiple choice and 11 true-false questions about a variety of finance-related topics. The questions were developed using item response theory to possess content validity across various components of financial knowledge, such as investing, insurance, inflation, and the time value of money. Second, financial confidence was assessed with three questions that asked respondents to report on their financial knowledge, handling of personal finances, and self-perceived comparison to other college students. The sum of these three items was employed as a proxy for subjective financial literacy (cf. Robb and Woodyard 2011; Lee et al. 2019). Financial experience was also assessed by means of a checklist of common financial decisions as well as questions about coursework and participation in any stock market simulations.

Family communication style was measured using the conversation orientation items from the RFCP (Ritchie and Fitzpatrick 1990) and the extended conformity orientation scale (ECOS; Kranstuber Horstman et al. 2018). The intersection of the conformity and conversation scores was taken to define the four family types (Koerner and Fitzpatrick 2002) with respondents from pluralistic families hypothesized to outscore those from protective families. No prediction was made for laissez faire and consensual families. The four sub-categories of the ECOS were also explored with non-directional hypotheses, given the lack of applied research using this recently developed scale. All reliabilities were adequate for analysis with point estimates of Cronbach's  $\alpha$  exceeding 0.75 for all sub-scales of the RFCP and ECOS.

Finally, family privacy orientation was operationalized with a 12-item scale, with 6 items for each of the interior and exterior orientations (Morr Serewicz and Canary 2008). Higher scores imply greater openness and sharing of information, either among family members (interior) or with outsiders (exterior). These two dimensions vary independently, and the primary measure of interest in the present study is the interior privacy orientation. Reliability in the sample was adequate for both the interior (Cronbach's  $\alpha = 0.7$ , 95% CI = 0.63, 0.76) and exterior (Cronbach's  $\alpha = 0.72$ , 95% CI = 0.65, 0.78) dimensions. It is hypothesized that greater openness will correlate with stronger financial literacy scores.

## 3.4. Analysis

The influence of family communication patterns on financial literacy was first tested using ANOVA models. The effects of family communication and family privacy orientation on financial literacy were also examined with multiple linear regression analysis. All statistical tests were conducted in the R statistical computing environment (R Core Team 2021).

#### 4. Results

Descriptive statistics of the study's continuous variables appear in Table 3. The primary dependent variable is financial knowledge, which is an objective measure of the respondents' financial knowledge. Financial confidence, which was measured using three self-assessment items, is used as an alternative dependent measure in some analyses, since it can be considered a measure of subjective financial literacy (e.g., Robb and Woodyard 2011). Financial experience is the count of finance-related activities that respondents have engaged in. All remaining measures are survey scales, as described previously.

Variable	Mean	SD
Financial Knowledge	5.10	2.42
Financial Confidence	9.64	1.88
Financial Experience	15.12	1.37
Conversation Orientation	35.51	9.89
Conformity Orientation	59.99	12.85
RPA	17.52	4.89
APV	17.32	4.91
EPC	14.27	3.89
QPB	10.89	3.16
Interior Privacy Orientation	17.55	4.32
Exterior Privacy Orientation	24.25	3.50

The first research hypothesis posited that respondents from pluralistic families would score better on financial knowledge than those from protective families, and this hypothesis was supported. Table 4 presents results of a one-way ANOVA model of financial knowledge scores by family type. The results are statistically significant, though with a small effect size (F[3, 210] = 2.58, p = 0.05,  $\eta^2 = 0.04$ ). Follow-up Tukey HSD tests reveal that the only statistically significant difference (p = 0.042) is between pluralistic (M = 5.66, SD = 2.22) and protective family types (M = 4.41, SD = 2.61). Meanwhile, financial knowledge scores for consensual (M = 5.07, SD = 2.45) and laissez faire (M = 4.86, SD = 2.41) family types lie between the scores for the pluralistic and protective family types. These results suggest that respondents from pluralistic families tend to possess more financial knowledge than those from protective families.

**Table 4.** Summary statistics of ANOVA results.

Family Type	Financial Literacy Mean (SD)	Financial Confidence Mean (SD)	
Pluralistic	5.66	9.75	
	(2.22)	(1.44)	
Protective	4.41	9.75	
	(2.61)	(1.94)	
Consensual	5.07	9.54	
	(2.45)	(2.37)	
Laissez Faire	4.86	9.60	
	(2.41)	(1.80)	
F-statistic (df 3, 210)	2.58	0.24	
<i>p</i> -value	0.05	0.62	
$\eta^2$	0.04	0.02	

The same one-way ANOVA model was estimated using financial confidence (sometimes referred to as subjective financial knowledge) as the dependent variable. The summary statistics and results in Table 4 show that in contrast to objective financial knowledge, subjective financial knowledge does not differ significantly among the four family types.

The results for the first research question are robust to a broader regression model in which the pluralistic family type is statistically significant above a baseline of protective family type (p = 0.034). While all control variables have the expected signs, only parental income (p = 0.011), parent working in finance (p = 0.034), and major in a business discipline (p < 0.01) were statistically significant. Table 5 presents complete regression results. The primary results described in this paragraph appear as Model 1. Since financial confidence can be conceived as subjective financial knowledge, Model 2 is a robustness check with that variable removed from the control variables. Results are qualitatively similar. A regression model was also estimated with financial confidence as the dependent variable, but the results were not statistically significant. For considerations of space, full results are not presented here.

Table 5. Regression results.

Independent Variable	Model 1	Model 2	Model 3	Model 4
Pluralistic family type	3.03 *	3.03 *		
3 31	(1.32)	(1.32)		
Consensual family type	0.03	0.05		
, ,,	(0.03)	(0.04)		
Laissez faire family type	-0.32	-0.49		
, , , ,	(1.15)	(1.14)		
Interior privacy orientation			1.53	1.52
1			(0.73)	(0.72)
Exterior privacy orientation			-0.96	-0.91
1 ,			(3.19)	(3.16)
Financial confidence	0.16		0.09	
	(2.36)		(0.56)	
Parental income	3.48 *	3.70 *	0.05	0.05
	(1.29)	(1.29)	(0.06)	(0.06)
Parent working in finance	2.80 *	2.77 *	-0.10	-0.10
Ü	(1.05)	(1.05)	(0.08)	(0.08)
Business major	6.61 *	3.69 *	7.04	7.02
•	(2.41)	(1.29)	(0.66)	(0.65)
Female	2.01	1.98	2.29	2.28
	(1.33)	(1.34)	(1.33)	(1.31)
Financial experience	0.88	0.98	0.76	0.76
_	(0.65)	(0.65)	(0.67)	(0.66)
Personal income	1.09	1.29	-0.64	-0.63
	(1.29)	(1.28)	(0.61)	(0.61)
Age 21–23	0.62	0.73	0.40	0.41
	(3.14)	(3.15)	(2.33)	(2.32)
Age 24–26	-0.05	-0.02	-0.95	-0.95
-	(0.56)	(0.56)	(0.65)	(0.64)
Allowance	-0.05	0.01	1.26	1.26
	(1.41)	(1.42)	(1.29)	(1.28)

All four regression models use objective financial literacy as the dependent variable. Models 1 and 2 emphasize the effect of family type, while Models 3 and 4 explore privacy orientation as the primary independent variables. All other variables are controls. Models 1 and 3 include subjective financial literacy as an independent variable, while Models 2 and 4 do not. Asterisks (\*) indicate statistical significance at the 5% level.

The second hypothesis was also supported. A regression model that included interior and exterior privacy orientations, along with all control variables, showed that higher scores on the interior measure was associated with better financial knowledge (p = 0.049). The coefficient for exterior privacy orientation was not statistically significant (p = 0.873). Regarding control variables, business majors outperformed non-business majors (p < 0.01),

and men slightly outperformed women (p = 0.080). No other control variables were statistically significant at even the 10% level. Again, full results appear in Table 5, with the baseline results reported as Model 3 and a robustness check without financial confidence as a predictor as Model 4. As before, financial confidence was also modeled separately as the dependent variable, but results were not statistically significant and are not reported here.

The third research hypothesis had moderate support; the predictions were correct in terms of directionality, though the magnitudes of the correlations with financial knowledge were generally small (Table 6). Financial experience and confidence had the largest correlations, suggesting that communication might have a secondary effect, after direct and subjective personal knowledge and experience. The four sub-dimensions of the ECOS also reported a range of outcomes, suggesting that they differ in their impact. Confirmatory factor analysis suggests that the four-factor model of the ECOS is appropriate (CFI = 0.914, RMSEA = 0.046), and future research may prefer to model the four dimensions separately, rather than as a summed score.

**Table 6.** Correlations with financial literacy.

Variable	Correlation	
Conversation	0.078	
Conformity	-0.065	
RPA	-0.001	
APV	-0.147	
EPC	-0.016	
QPB	-0.031	
Interior	0.108	
Exterior	-0.072	
Experience	0.156	
Confidence	0.175	

The table displays Pearson correlations of all variables with measured financial knowledge. The four sub-scales of conformity orientation are respecting parental authority (RPA), experiencing parental control (EPC), adopting parents' values/beliefs (APV), and questioning parents' values/beliefs (QPB). Interior and exterior refer to family privacy orientation.

## 5. Discussion

The results of the present study build on Hanson and Olson (2018) to imply that family communication patterns and privacy orientation affect financial literacy among college students. First, it is worth examining the relationship between family communication style and objective financial knowledge of young adults. The results show that higher financial knowledge scores are associated with families whose communication styles favor communication and sharing information. These findings suggest that family conversations are one likely method for transmitting financial knowledge to young adults, aligning with previous work regarding parenting styles and socialization (Yang et al. 2014). One extension of the present survey is an exploration of the expanded conformity orientation scale (Kranstuber Horstman et al. 2018). The reported correlations of the four sub-scales differ by an order of magnitude, with the strongest correlation measured between financial knowledge and adopting parents' values and beliefs. The multi-dimensional scale of family communication has the potential to provide more nuance in understanding the transmission of financial knowledge within the family. In particular, it seems that rote adoption of parental values and beliefs is associated with lower financial knowledge scores. This finding aligns with the notion that conversations and openness regarding personal financial matters is beneficial for young adults in building financial literacy.

The present survey extends this understanding of general communication patterns with an investigation specifically of family privacy orientation. While communication orientation describes an overall pattern of conversations, CPM theory and associated measurement scales describe sharing potentially sensitive information. The Morr Serewicz and Canary (2008) scale distinguishes between sharing information inside and outside the family. The relationship between interior privacy orientation and objective financial

knowledge reinforces the notion that more open dialogue within the family is an important socialization and instructional channel for young adults to learn about financial topics.

The results also have pedagogical implications for financial literacy education, which has important ramifications beyond personal well-being, including impacts on civic life, democratic values, and social justice (Pinto and Coulson 2011; Arthur 2012). The results here argue for an emphasis on discussion and communication about financial issues. If these cannot take place within the family, schools and other educational programs should encourage interaction and conversation in the learning process.

Since personal financial literacy has strong societal ramifications, various alternatives to direct financial education have been suggested, including mandated government programs (e.g., Statman 2013). Financial advisors are also sometimes touted as a replacement for financial literacy, in part because individuals are unlikely to possess sufficient understanding of the complexities of the modern financial system (Willis 2008, 2011; Guiso and Viviano 2014). However, advice typically serves as a complement to rather than a substitute for financial literacy (Collins 2012). Furthermore, there is a strong correlation between financial knowledge and advice-seeking (Hackethal et al. 2012), and demographics of individuals utilizing financial advisors raise important social justice questions regarding race, gender, and privilege (Richman et al. 2008; Pinto and Chan 2010). Consequently, personal financial literacy is still generally regarded as playing an important role in encouraging sound financial decisions, and open conversations within families and classrooms can help with the goal of increased financial literacy and better financial decisions.

Given the moderately-sized convenience sample employed in this study, there are limitations to generalizing these findings. The sample was drawn from currently enrolled college students, who presumably possess more financial experience and access to financial information than the general public. Thus, one concern regarding the influence of family is that financial literacy entrenches socioeconomic status, placing even greater demands on education efforts to reach individuals who lack a positive influence from their families. Future research can expand on the sample to replicate these findings and aid in generalizing the results to a broader population. In particular, studies of high school students might help demonstrate differential effects of socialization factors by age.

Additionally, it is important to note that the effect sizes in this study are small and that young adults learn about finance from multiple sources, including schools, friends, workplaces, and family. Ryack (2011) implies that risk tolerance is influenced more strongly by experience and education than by family socialization. Furthermore, young adults are likely able to observe and intuit whether their parents are a good source of financial information and seek information elsewhere, if necessary (Hilgert et al. 2003). Therefore, another useful extension of the study would be to measure financial literacy of young adults and their parents in a matched sample.

In the modern financial economy, individuals bear substantial personal responsibility for managing their financial affairs. Thus, financial literacy will continue to have a strong impact on financial behavior and well-being. Educators, regulators, and governments have a strong interest in understanding influences on financial literacy in order to help individuals optimize their personal finances. This article contributes to the evidence that family communication style and privacy orientation impact financial knowledge. Individuals from families that encourage communication and sharing of information generally possess superior financial literacy. Education initiatives should favor family involvement as well as classroom discussions and applications.

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