



ORIGINAL CONTRIBUTION

Disconnect between parents' values for saving and actual savings behavior: Impact on children's education and financial decision-making

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Keywords

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Abstract. The objective of this study was to determine the feasibility of encouraging low-income parents to save for their children through a savings program offered in public schools. Since children's savings have long-lasting effects on college entrance and graduation rates, this paper looked specifically at the relationship between parents' savings values and whether they opened a savings account for their child. A convenience sampling design was used to recruit schools for this study. A total of 17 public elementary schools was recruited for this study with a sample of 1,764 respondents. The survey instrument used in this study consisted of 13 four-point Likert scaled items and 13 other short answers, multiple-choice or fill-in-the-blank questions. Covariates including individual characteristics of the parents and household characteristics were examined to see if they were significantly related to whether or not a child's savings account was opened. Implications of the findings concerning early intervention work with parents are discussed, as are recommendations for future research with low-income families.

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INTRODUCTION

Background

Financial well-being eludes many. Why? Because individuals lack the personal attributes of financial knowledge and critical thinking skills that are prerequisite to being able to make informed financial decisions (Consumer Financial Protection Bureau, 2015; Manager, 2017; Organization for Economic Co-operation and Development, 2013). In order to achieve high levels of financial well-being as an adult, individuals need to be financially socialized at an early age. Developmental psychologists report that the ability to stay focused on long-term goals and learning how to process information develop rapidly in children during the first five years of life. Researchers have observed that when children exhibit high levels of these critical skills, they are better able to weather the negative effects of living in poverty, for example.

Financial socialization of children begins with parents, since parents are the first-line teachers at home (Danes and Haberman, 2007; Danes, Sharon, Catherine and Laurie, 1999; Gudmunson and Danes, 2011). Despite this fact, examination of the role that parents play in developing the financial well-being of children versus young adults, has been limited, especially among low income households.

Savings, in general provide opportunities for children to accumulate the knowledge and skills they will need in the workplace and will enable them to make responsible decisions in the marketplace that directly impact the quality of their lives (Elliott, Jung and

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Friedline, 2010; Elliott, 2013). When savings were larger and targeted for school, and when family incomes were higher, college attendance and graduation percentages increased (Elliott, 2013). Also, children with college savings are more likely to get better grades and complete more years of education (Elliott and Beverly, 2011).

LITERATURE REVIEW

Financial (II) Literacy of the Young Adult American

In order to have financial well-being, one needs to have the financial knowledge, appropriate financial attitudes, and sound financial practices (Totenhagen *et al.*, 2015). However, previous studies indicate that high school and college students in the U.S. lack financial knowledge and skills (Jorgensen and Salva, 2010; Jacolbia, 2016; Mandell, 2009), and efforts in financial education to address these deficits have mixed results (Peng, Bartholomae, Fox and Cravener, 2007; Yates and Ward, 2011).

Financial Socialization of Children

In a world that is becoming increasingly financially complex, it is important to socialize children and teach them smart money management skills earlier in life. Parents are the main agents of socialization for elementary and middle school children (Ivan and Dickson, 2008; Edano, Punzalan and Tumutod, 2017), and parents' influence on their children's understanding of money management begins early on in life. For example, children as young as five years old are capable of understanding economic concepts, and have knowledge and attitudes about their role as consumers before they even start school (Kuhlmann, 1983; Fatimah, Norhafizah, Noryanti, Rozieana and Hassan, 2015; Webley and Nyhus, 2006).

Factors Associated with Personal Financial Management

Personal financial management occurs when an individual considers his/her needs versus wants and applies skills to make financial decisions (Ozmete and Hira, 2011). This decision making process is influenced by cognitive, social and psychological factors. Cognitive factors include financial knowledge, social factors related to parental influence, and psychological factors such as self-discipline, thoroughness (e.g., conscientiousness) and perceived control over outcomes (e.g., locus of control) (Bandura, 2001; Johnson and Sheraden 2007; Perry and Morris, 2005; Rimer and Glanz, 2005; Shim and Serido, 2011).

Recent research findings question the assumption that improved financial knowledge alone results in more effective financial decisions (Chen and Volpe, 1998; Hilgert, Hogarth and Beverly, 2003; Lusardi and Mitchell, 2007; Robb and Woodyard, 2011; Tang, Baker and Peter, 2015). Rather, these studies identified the influence of social (e.g., parental influence) and psychological factors (e.g., self-control, thoroughness, locus of control) on an individual's ability to make effective financial decisions including cash flow, credit and saving.

Purpose and Research Objectives

Since basic savings or saving for college begins with action by parents, several objectives were identified for this study of low-income households. They included an examination of: 1) The parents' stated savings values (It is important for my child to start saving early in life), 2) the extent to which actual savings behavior occurred (I have opened a savings account in my child's name), 3) the reasons why parents did not open a savings account in a child's name, and 4) the covariates that were related to whether or not a child's savings account was opened.

Research Hypotheses

Four hypotheses were identified relative to examining the covariates associated with whether or not parents opened a child's savings account. They included:

H1: There is a positive relationship between parent's age and whether a savings account was opened in a child's name.

H2: There is a positive relationship between household income and whether a savings account was opened in a child's name.

H3: There is a positive relationship between number of children in the family and whether a savings account was opened in a child's name.

H4: There is a positive relationship between family type and whether a savings account was opened in a child's name and reasons for not opening a child's savings account.

METHODOLOGY

The survey instrument used in this study consisted of 13 four-point Likert scaled items and 13 other short answer, multiple choice or fill-in-the-blanks questions. The survey collected background information about the parent participants, their values/attitudes towards saving and whether or not they opened a savings account in their child's name.

A convenience sampling design was used to recruit schools for this study. A total of 17 public elementary schools was recruited for this study with a sample of 1,764 respondents. The response rate of this survey questionnaire is 27 percent.

First, schools located in low-income districts were identified by whether or not 50 percent or more of a school's student population qualified for a school lunch subsidy program. If the school met the definition, then that school was identified as having students living in a low-income household. The unit of analysis for this study was the household in which the child resides.

RESULTS

A total of 1,764 parents completed and returned the survey questionnaire. Due to non-response on some survey questions, analyses were based on 1,645 cases. The median age of the parents interviewed was 37 years. They identified their ethnicity as Asian (40.6%), Native Hawaiian (23.1%), White (9.3%), Pacific Islander (8.6%), African American (.7%) or other (5.2%). The predominant family type was dual parent household (*N* = 1,198, 78.9%) and the single parent household makes up 26.1% (*N* = 423) of the sample. The median household annual income was \$45,000. More than two out of every three families lived in a rural community on an island other than Oahu, where the state's capitol is located.

Relationship of Parents' Savings Values and Actual Savings Behavior

When savings values of the parents' (Important for child to save early) were compared with actual savings behavior (whether or not a savings account was opened in my child's name) significant differences were found (*p* < .0001, see Table 1).

TABLE 1. Comparison by saving for child versus non-saving: Disconnect between parents' actual savings behavior versus savings values

	All		Saving for Child						<i>p</i> value ¹
			Yes		No		Missing		
	Mean	Std	Mean	Std	Mean	Std	Mean	Std	
Important for child to start saving early in life	1.3	0.5	1.2	0.5	1.4	0.5	1.7	0.7	<.0001

When asked how strongly they valued early savings for their children, on a Likert-scaled 4-point scale where 1 = strongly agree and 4 = strongly disagree, 99.0% of the parents

said they either “strongly agreed” or “agreed” with the statement (see Table 2). However, despite agreeing that it was important for their child to save regularly and early in life, only 42.9% of these same parents actually opened a savings account in their child’s name. Some reasons for this observed inconsistency (or disconnect) between savings values and actual savings behavior are listed in Table 3.

Among the reasons parents listed for not opening a savings account for a child were: lack of funds (34.6%) and never got to it (19.6%). Of the parents who opened a children’s savings account, the median amount was \$25 (see Table 3).

TABLE 2 . Disconnect between parents’ savings value versus savings behavior

	Parent’s savings value (It is important for child to start saving money regularly early in life)			
	Strongly Agree (1)	Agree (2)	Disagree (3)	Strongly Disagree (4)
Parent’s savings behavior (Child has savings account his/her name)	%	%	%	%
Yes (1) 42.9%	78.8	20.2	1.0	0.0
No (2) 55.1%	64.1	32.8	2.3	0.8

TABLE 3 . Reasons for not saving for child and dollar amount saved

Do not have saving for child (<i>N</i> = 995)		
Reasons for not having savings	<i>N</i>	%
Cannot afford	344	34.6
Just never got to it	195	19.6
Other	133	13.4
Think that we have time in the future to do this	95	9.5
My child is too young to start	77	7.7
Never thought of it	54	5.4
Too inconvenient to do so	25	2.5
Having saving for child (<i>N</i> = 734) ¹		
Median amount of saving in U.S. dollar		25.0
Quartile 1		20.0
Quartile 3		60.0
Inter-quartile range		40.0
Number of valid response		493
Missing		241

1. Median and interquartile range

Research Hypotheses

Table 4 summarizes the characteristics of the parents and their households and presents findings relative to the four hypotheses that were tested.

H1: There is a positive relationship between parent’s age and whether a savings account was opened in a child’s name.

TABLE 4. Characteristics of parents of elementary school households

	All		Saving for Child				Missing		p value ¹
	N	%	Yes		No		N	%	
Number of parents	1764	100.0	734	100.0	995	100.0	35	100.0	
Age ²	37	10	37	10	36	11	35	11	0.09
Household income ²	45000	44000	55000	45000	35000	37500	60000	0	<0.0001
Number of children ²	2	1	2	1	3	1	3	2	<0.0001
Area of resident									0.10
Rural	1181	67.0	503	68.5	644	64.7	34	97.1	
Urban	583	33.0	231	31.5	351	35.3	1	2.9	
Family type									<0.0001
Single parent	423	24.0	158	21.5	259	26.0	6	17.1	
Dual parents	1198	67.9	543	74.0	648	65.1	7	20.0	
Missing	143	8.1	33	4.5	88	8.8	22	62.9	
Family role									0.0003
Mother	1384	78.5	617	84.1	758	76.2	9	25.7	
Father	248	14.1	84	11.4	161	16.2	3	8.6	
Grandmother	39	2.2	17	2.3	22	2.2	0	0.0	
Grandfather	6	0.3	1	0.1	5	0.5	0	0.0	
Missing	87	4.9	15	2.0	49	4.9	23	65.7	
Ethnicity									0.03
American Indian/Alaska Native	17	1.0	8	1.1	9	0.9	0	0.0	
Asian	717	40.6	336	45.8	377	37.9	4	11.4	
African American	13	0.7	3	0.4	10	1.0	0	0.0	
Native Hawaiian	407	23.1	149	20.3	254	25.5	4	11.4	
Pacific Islander	151	8.6	56	7.6	94	9.4	1	2.9	
White	164	9.3	70	9.5	94	9.4	0	0.0	
Other	91	5.2	40	5.4	48	4.8	3	8.6	
Missing	204	11.6	72	9.8	109	11.0	23	65.7	

1. p-values derived from chi-square and t-statistic

2. Median and inter-quartile range

Age of parents was not significantly related to whether or not a children's savings account was opened.

H2: There is a positive relationship between household income and whether a savings account was opened in a child's name.

Higher annual household income was significantly related to having a children's savings account ($p < .0001$). This finding is supported in the literature on children's savings accounts (Elliott 2013; Elliott and Beverly 2011; Elliott *et al.*, 2012).

In families with a child's savings account, the median household income was \$55,000 compared to \$35,000 in households with no child's savings account.

H3: There is a positive relationship between number of children in the family and whether a savings account was opened in a child's name.

The more children in the family, the more likely it was that there was no children's savings account opened. This finding was significant ($p < .0001$). In families with a child's savings account, the median number of children present was 2, compared to 3 in families with no child's savings account.

H4: There is a positive relationship between family type and whether a savings account was opened in a child's name.

Dual parent families were more likely to have a children's savings account than single parent families. This finding was significant ($p < .0001$). When comparing whether or not a child's savings account was opened by the household type, only 21.5% of single-parent households had a child's savings account, compared to 74.0% in dual-parent house-

holds. Among the households that did not have a child's savings account, a larger percent of single-parent households did not open a child's savings account compared to the dual-parent households (see Table 4).

As stated earlier, of the parents who "agreed" or "strongly agreed" that it is important for a child to start saving money regularly in life, only 42.9% actually opened a savings account for their child (see Table 2). This disconnect can be viewed as an opportunity for intervention by practitioners who can work to remove barriers to opening children's savings accounts.

Several existing commercial bank policies may be preventing low income families from opening a savings account for their child. First, commercial banks often require a large (for low income clients) initial deposit amount (typically USA \$100) in order for a savings account to be opened. Second, many banks also require that a minimum balance (of USA \$300) be maintained to keep the savings account active, and thirdly, once the account becomes inactive, the account will incur monthly fees or be closed. In comparison, federal credit unions often require only USA \$25 or less to open a savings account. Therefore, if federal credit unions actively recruit low income families as customers, they will be making an investment with long-term positive benefits for the parents and children, in particular, who live in the communities they serve.

LIMITATIONS AND RECOMMENDATIONS

Clearly, this study is not without limitations. The use of a convenience sample makes it not possible to generalize the findings to a larger population. Given the advice of a school principal that the survey should not be more than one sheet of paper otherwise the parents will not respond to the survey, many important questions were not included in the survey. In addition, there may be confounding factors that may explain why parents who say they value saving regularly for themselves have not opened a savings account for their child, such as situations where the parents work at multiple jobs and have no time to open a savings account or when parents avoid making financial transactions because of their limited English-speaking skills.

Since the initial objective of this study was to determine the feasibility of encouraging low-income parents to save for their children through a savings program offered in the public schools, the survey instrument developed for this project did not include some important gender-based financial literacy issues such as whether the financial socialization process differs for male versus female children and how these differences impact the financial decision making abilities of boys versus girls later in life.

Future research should examine these issues and be expanded to include low-income children and parents who come from understudied populations such as native Hawaiian and Pacific Islanders. Future research may also benefit from the addition of a qualitative component that explores the roadblocks to opening a savings account in a child's name. Findings can then inform practice as practitioners are better able to deliver more individualized financial help based on their clients' gender, ethnicity and socio-economic background.

REFERENCES

- Bandura, Albert. 1999. Social cognitive theory: An agentic perspective. *Asian Journal of Social Psychology* 2, no. 1: 21-41. DOI: 10.1111/1467-839x.00024
- Boelens, R., De Wever, B. and Voet, M. 2017. Four key challenges to the design of blended learning: A systematic literature review. *Educational Research Review*, 22: 1-18.
- Ivan, Beutler, and Lori Dickson. 2008. Consumer economic socialization. In *Handbook of consumer finance research*, ed. Jing J. Xiao. New York, NY: Springer.
- Chen, Haiyang, and Ronald P. Volpe. 1998. An analysis of personal financial literacy among college students. *Financial Services Review* 7, no. 2: 107-128. DOI: 10.1016/s1057-0810(99)80006-7
- Consumer Financial Protection Bureau. 2015. *2015 consumer response annual report*. URL: <https://bit.ly/2vn3h5n> (accessed on February 25, 2016)
- Danes, Sharon M., Catherine Huddleston-Casas, and Laurie Boyce. 1999. Financial planning curriculum for teens: Impact evaluation. *Journal of Financial Counseling and Planning* 10, no. 1: 26-34. DOI: 10.1007/978-1-4419-6908-8_3
- Danes, Sharon, and Heather Haberman. 2007. Teen financial knowledge, self-efficacy, and behavior: A gendered view. *Journal of Financial Counseling and Planning* 18, no. 2: 1-13. DOI: 10.1111/j.0197-6664.2005.00010.x
- Edano, Domingo C, Punzalan Edna Marie D, and Tumutod Natty L. 2017. Transformational leadership styles of public elementary school principals in relation to school social organizational factors in region III, Philippines. *International Journal of Humanities, Arts and Social Sciences* 3, no. 3: 113-121. DOI: 10.20469/ijhss.3.20003-3
- Elliott, William. 2013. *Small-dollar children's savings accounts and college outcomes*. Center for Social Development Working paper No. 13-05, Washington University, St. Louis, MO.
- Elliott, William, and Sondra Beverly. 2011. Staying on course: The effects of savings and assets on the college progress of young adults. *American Journal of Education* 117, no. 3: 343-374. DOI: 10.1086/659211
- Elliott, William, Hyunzee Jung, and Terri Friedline. 2010. Math achievement and children's savings: Implications for child development accounts. *Journal of Family and Economic Issues* 31, no. 2: 171-184. DOI: 10.1007/s10834-010-9185-4
- Elliott, William, Monique Constance-Huggins, and Hyun-A. Song. 2013. Improving college progress among Low-to Moderate Income (LMI) young adults: The role of assets. *Journal of Family and Economic Issues* 34, no. 4: 382-399. DOI: 10.1007/s10834-012-9341-0
- Gudmunson, Clinton G., and Sharon M. Danes. 2011. Family financial socialization: Theory and critical review. *Journal of Family and Economic Issues* 32, no. 4: 644-667. DOI: 10.1007/s10834-011-9275-y
- Hilgert, Marianne A., Jeanne M. Hogarth, and Sondra G. Beverly. 2003. Household financial management: The connection between knowledge and behavior. *Federal Reserve Bulletin* 89, no. 4: 309-315.
- Hubackova, S. and Semradova, I., 2016. Evaluation of blended learning. *Procedia-Social and Behavioral Sciences*, 217: 551-557.
- Jacolbia, Rovelina B. 2016. Future educators' perceptions on technology and livelihood education status and development of work skills. *Journal of Advances in Humanities and Social Sciences* 2, no. 2: 85-91. DOI: 10.20474/jahss-2.2.3
- Johnson, Elizabeth, and Margaret S. Sherraden. 2007. From financial literacy to financial capability among youth. *Journal of Sociology and Social Welfare* 34, no. 4: 119-125.
- Jorgensen, Bryce L., and Jyoti Savla. Financial literacy of young adults: The importance of parental socialization. *Family Relations* 59, no. 4: 465-478. DOI: 10.1111/j.1741-3729.2010.00616.x
- Kuhlmann, Eberhard. 1983. On the economic analysis of the information-seeking behaviour of consumers. *Journal of Consumer Policy* 6, no. 2: 231-237. DOI: 10.1007/bf00411383
- Lusardi, Annamaria, and Olivia S. Mitchell. 2007. Baby boomer retirement security: The roles of planning, financial literacy, and housing wealth. *Journal of Monetary Economics* 54, no. 1: 205-224. DOI: 10.1016/j.jmoneco.2006.12.001
- Manager, D. 2017. The aesthetic dimension of decision making: A case study of a German software company. *International Journal of Humanities, Arts and Social Sciences* 3, no. 5: 223-230. DOI: 10.20469/ijhss.3.20005-5
- Mandell, L. 2009. *The impact of financial education in high school and college on financial literacy and subsequent financial decision making*. URL: <https://bit.ly/2HMaX3S> (accessed on January 13, 2017).
- Organization for Economic Co-operation and Development. 2013. *PISA 2012 assessment and analytical framework: ISSN: 2414-3111*
DOI: 10.20474/jahss-3.6.5

Mathematics, reading, science, problem solving and financial literacy, OECD Publishing.

URL: <https://bit.ly/2Ha9AyC> (accessed on March 13, 2015).

Ozmete, Emine, and Tahira Hira. 2011. Conceptual analysis of behavioral theories/models: Application to financial behavior. *European Journal of Social Sciences* 18, no. 3: 386-404. **DOI:** 10.4018/978-1-4666-7484-4.ch008

Peng, Tzu-Chin Martina, Suzanne Bartholomae, Jonathan J. Fox, and Garrett Cravener. 2007. The impact of personal finance education delivered in high school and college courses. *Journal of Family and Economic Issues* 28, no. 2: 265-284.

DOI: 10.1007/s10834-007-9058-7

Perry, Vanessa G., and Marlene D. Morris. 2005. Who is in control? The role of self-perception, knowledge, and income in explaining consumer financial behavior. *Journal of Consumer Affairs* 39, no. 2: 299-313.

DOI: 10.1111/j.1745-6606.2005.00016.x

Rimer, B., and Glanz K. 2005. *Theory at a glance a guide for health promotion practice.*

URL: <https://bit.ly/2H8pbyj> (accessed on October 13, 2010).

Robb, Cliff A., and Ann Woodyard. 2011. Financial knowledge and best practice behavior. *Journal of Financial Counseling and Planning* 22, no. 1: 60-70. **DOI:** 10.4148/jft.v3i1.1453

Shim, S., and Serido J. 2011. *Young adults' financial capability.*

URL: <https://bit.ly/2qL2rKq> (accessed on February 26, 2014)

Siti Fatimah, A. Z., Norhafizah M. S., Noryanti M., Rozieana K., and Hassan, R. G. 2015. A study of students' performance in calculus and their attitudes toward the course using tripartite model. *International Journal of Humanities, Arts and Social Sciences* 1, no. 1: 30-35. **DOI:** 10.20469/ijhss.20005

Tang, Ning, Andrew Baker, and Paula C. Peter. 2015. Investigating the disconnect between financial knowledge and behavior: The role of parental influence and psychological characteristics in responsible financial behaviors among young adults. *Journal of Consumer Affairs* 49, no. 2: 376-406. **DOI:** 10.1111/joca.12069

Totenhagen, Casey J., Deborah M. Casper, Kelsey M. Faber, Leslie A. Bosch, Christine Bracamonte Wiggs, and Lynne M. Bor-den. 2015. Youth financial literacy: A review of key considerations and promising delivery methods. *Journal of Family and Economic Issues* 36, no. 2: 167-191. **DOI:** 10.1007/s10834-014-9397-0

Webley, Paul, and Ellen K. Nyhus. 2006. Parents' influence on children's future orientation and saving. *Journal of Economic Psychology* 27, no. 1: 140-164. **DOI:** 10.1016/j.joep.2005.06.016

Yates, Dan, and Chris Ward. 2011. Financial literacy: Examining the knowledge transfer of personal finance from high school to college to adulthood. *American Journal of Business Education* 4, no. 1: 65-75. **DOI:** 10.19030/ajbe.v4i1.1274

— This article does not have any appendix. —