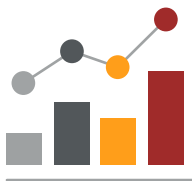


Parent Financial Socialization Scale: Development and Preliminary Validation

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A team of researchers at the University of Arizona and Brigham Young University have developed three new measurement scales for family financial socialization, providing the research community with the first set of theoretically-driven, psychometrically-tested constructs in a novel data set. The resulting scales and data offer opportunities for research in family financial socialization that utilizes consistent, valid and reliable scales of measurement, allowing for better comparison and consistency across studies and the ability to differentiate between more nuanced aspects of family financial socialization through this multidimensional scale.

THE PARENT FINANCIAL SOCIALIZATION SCALE AND SUBSCALES

The researchers developed and validated three scales of parent financial socialization that address the three main methods of family financial socialization: modeling, discussion and experiential learning.

- **Parent financial modeling** is the process of learning through child observation of parental financial behaviors (eight items).
- **Parent-child financial discussion** is learning conducted through verbal communication between parent(s) and children about finances (nine items).
- **Experiential learning of finances** is the process of acquiring financial knowledge through life experiences (three items).

These three scales are also subscales of a multidimensional latent construct: the Parent Financial Socialization Scale (20 items).³ These scales are intended to measure how emerging adults recall experiencing these three respective methods of family financial socialization as children.⁴ Respondents answer each item using a seven-point Likert scale (one represents, “Strongly Disagree,” and seven represents, “Strongly Agree”).

Background Concepts and Terms Defined

Family Financial Socialization:

The process of acquiring and developing values, attitudes, standards, norms, knowledge and behaviors [within families] that contribute to the financial viability and individual well-being.¹ This field of study assesses how children learn financial lessons from their parents and how those processes impact outcomes later in life.

Scale and Latent Construct:

A measure (or metric) that assigns a measurable, quantitative value to abstract concepts or “latent constructs”² (e.g., family financial socialization). Scales are a vital building block for research.

Psychometric Testing:

A set of tests used to evaluate whether a scale reflects the construct it is intended to represent.

Measurement Invariance:

An aspect of a scale’s validity, reflecting the extent to which a scale accurately reflects its construct for different population subgroups, such as different races, gender identities or sociodemographic groups.

¹ Danes, S.M. (1994). Parental perceptions of children’s financial socialization. *Financial Counseling and Planning*, 5(1), 127-149 at p. 128.

² Latent constructs can also be referred to more generally as “constructs.”

³ The scale questions are located on the last page of this brief.

⁴ “Emerging adults” refers to individuals aged 18 to 30. “Children” refers to their experiences when they were less than 18 years of age.

Former scales have clustered parental modeling and discussion into a singular, unidimensional construct. In contrast, this research investigated those concepts independently and included a scale for experiential learning — a novel contribution of this work.

SCALE DEVELOPMENT AND VALIDATION

The authors adapted best practices established in health, social and behavioral research to develop and validate the family financial socialization scales.⁵ The scale development process includes creating an initial repository of potential survey items that are aggregated to measure a latent construct. The validation process includes qualitative and quantitative methods to test the validity of the scale and its reliability (i.e., psychometric testing).

Scale Development

The authors first generated an initial pool of items to submit to expert assessments and pre-testing through cognitive interviews with members of the target population (emerging adults living in the United States). The expert assessment and cognitive interviews resulted in revisions to the initial scale items. An initial sample of 402 emerging adults living in the U.S. then responded to the revised scale items. The researchers further revised the items due to initial item reduction and confirmatory factor analyses.

Scale Validation

A final sample of 4,182 emerging adults living in the U.S. responded to the revised scale items (see the Final Data Set section for more information about the design of this sample). The data from this sample was used for various tests, including final item reduction analysis and confirmatory factor analysis, reliability tests, and tests for measurement invariance. The researchers tested for invariance across respondent sex, race and parental educational attainment. In addition, the research team used the preliminary data (collected from the initial sample of 402 individuals) to conduct a construct validity test, as it contained data on preexisting scales against which the new scales could be tested. The final confirmatory factor analysis achieved acceptable model fit, a redundancy test confirmed that the three scales are distinct constructs, and a multilevel confirmatory factor analysis indicated that the three scales could be considered subscales to a multidimensional latent construct, the Parent Financial Socialization Scale.

MORE ABOUT SCALE DEVELOPMENT AND VALIDATION

The essential scale development and validation should involve generating an initial item pool and qualitatively assessing items for respondent comprehension. This initial research gives the researcher preliminary evidence about whether the scale measures what it is intended to measure. Further quantitative validation processes should use survey responses for the proposed scale to perform statistical tests of reliability and validity. Researchers should then reduce the scale item pool and conduct additional statistical analysis to determine the alignment of individual questions to predetermined constructs. Finally, researchers will evaluate relationships of the measured construct to related and unrelated concepts and test for scale measurement invariance across diverse groups.⁶

⁵ See Boateng, G.O., Neilands, T.B., Frongillo, E.A., Melgar-Quiñonez, H.R., & Young, S.L. (2018). Best practices for developing and validating scales for health, social, and behavioral research: A primer. *Frontiers in Public Health*, 6, Article 149. <https://doi.org/10.3389/fpubh.2018.00149>

⁶ For another example of this process, see https://www.nefe.org/_images/research-in-review/Understanding-Personal-Saving-Orientation-Dholakia-Report.pdf and Boateng, et al. (2018).

FINAL DATA SET

The project's final data set comprises 4,182 emerging adults (18-30 years old) living in the United States. The data captures responses to each of the Parent Financial Socialization Scale items and constructs related to financial attitudes, financial behaviors, financial well-being, romantic relationships, and mental health.

The sample was designed to balance respondents who identify as male and female (respectively), and oversample racial minorities and different levels of parental income and educational attainment. Some highlights of the final data set include:⁷

- Oversampling of Black/African American (22.0 percent), Hispanic/Latino/Latina/Latinx (19.8 percent), and Asian (14.6 percent) respondents.
- Diversity of parental educational background: 50.4 percent no parent with a college degree, 47.4 percent at least one parent with a college degree.
- Diversity of ages within emerging adulthood (ages 18 – 30), with a mean age of 23.8.
- Diversity of life experiences: 46.6 were currently in a romantic relationship, 21.1 percent had at least one child and 38.4 percent were currently attending school.

TAKEAWAYS

This research resulted in validated scales for each of the three main methods of family financial socialization, respectively, as well as a multidimensional latent construct of parent family financial socialization. These scales are generalizable across the United States' emerging adults (by sex, race, and parental education level), which will allow for more inclusive data on family financial socialization. These scales will allow for research across different segments of the population regarding family financial socialization, related outcomes and how to improve teaching financial lessons at home.

Ideas for Further Research

The authors are conducting additional research utilizing and building on these scales to develop and validate a reduced Parent Financial Socialization Scale that will use fewer items, making it easier to include in surveys. They are also studying the relationship between family financial socialization and later-life outcomes, including financial outcomes, romantic/relationship outcomes and mental health outcomes.

After the scales are further reduced and published, the National Endowment for Financial Education hopes that scholars and research organizations will substitute existing family financial socialization survey items with these rigorously tested and psychometrically-valid scales. The research community's adoption of these new scales will ensure the following: a) that research is consistently measuring these concepts, b) that the concepts reflect the most recent theoretical understanding of family financial socialization, and c) that research findings are more consistent or yield a better understanding of earlier, inconsistent findings given the use of these valid and reliable scales.

The authors encourage researchers interested in working with the final data set collected in this project to inquire about the data at lebaronashley@gmail.com. Although data use agreements are such that the data cannot be shared outside the University of Arizona and Brigham Young University, the study investigators are willing and eager to collaborate on projects with those interested in the data set.

⁷ See the following resource for additional descriptive statistics for the final data set: "Measuring Family Financial Socialization (MFFS) Project Codebook."

Parent Financial Modeling Subscale

1. Growing up, I learned how to manage money by observing how my parents managed money.⁸
2. While I was growing up, my parents were good examples of how to manage money.
3. When it came to managing money while I was growing up, I looked to my parents as my role models.
4. Growing up, I often made financial decisions based on what my parents had done in similar situations.
5. Growing up, I sometimes saw my parents use a budget to manage their money.
6. Growing up, I knew that my parents regularly tracked their expenses.
7. While I was growing up, my parents prioritized saving money.
8. While I was growing up, my parents preferred to save up for most purchases rather than go into debt.

Parent-Child Financial Discussion Subscale

9. I learned how to manage my money through conversations with my parents while I was growing up.
10. My parents talked with me about money while I was growing up.
11. While I was growing up, my parents told me about their past financial experiences.
12. While I was growing up, my parents were open with me about their budget (or, if they did not have a budget, were open with me about that).
13. My parents would teach me about money during day-to-day activities, such as at the bank, at the store, etc. while I was growing up.
14. While I was growing up, my parents talked to me about financial concepts when I was ready for them.
15. Growing up, I knew I could go to my parents when I had questions about money.
16. Growing up, I asked my parents questions about money.
17. While I was growing up, my parents would answer my questions about money.

Experiential Learning of Finances Scale

18. My parents gave me opportunities to practice money management while I was growing up.
19. My parents gave me hands-on experiences with money while I was growing up.
20. While I was growing up, my parents encouraged me to put a certain percentage of my money away for something like savings or donations.



About the Study

The National Endowment for Financial Education® (NEFE®) created this research brief to highlight aspects of the following published journal article: LeBaron-Black, A. B., Curran, M. A., Hill, E. J., Freeh, M. E., Toomey, R. B., & Speirs, K. E. (2021). Parent Financial Socialization Scale: Development and preliminary validation. *Journal of Family Psychology*. Advance online publication. <https://doi.org/10.1037/fam0000927>

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⁸ When interpreting the scale items, respondents are told to consider the term parents to refer to their primary caregiver(s) from birth to age 18, *money management* to refer to, "what someone does with their money," and *growing up* to refer to, "as early as you can remember until about age 18."