September 2016

Building blocks to help youth achieve financial capability

A new model and recommendations

Consumer Financial Protection Bureau

Table of contents

Table of contents **1**

1. Introduction **3**

2. The developmental model **6**

2.1 What is financial capability? 7

2.2 What are the three youth building blocks of financial capability? 9

2.3 When do children and youth acquire the building blocks of financial capability? 12

2.4 How do children and youth acquire the building blocks of financial capability? 15

2.5 What are the building block competencies for each developmental stage? 17

2.6 Why do developmental windows present the best opportunities for youth to acquire the building blocks of financial capability? 31

3. Recommendations for applying the financial capability developmental model **33**

3.1 Recommendation one: For children in early childhood, focus on developing executive function skills 35

3.2 Recommendation two: Help parents and caregivers to more actively influence their child's financial socialization 39

3.3 Recommendation three: Provide children and youth with experiential learning opportunities 44

3.4 Recommendation four: Teach youth financial research skills 51

4. Conclusion **54**

Appendix A: **56**

Youth capability milestones summary 56

Appendix B: **59**

Understanding Financial Well-Being 59

Appendix C: **61**

Methodology 61

Appendix D: **64**

Definition of key terms 64

1. Introduction

To navigate the financial marketplace effectively, adults need financial knowledge and skills, access to resources, and the capacity to apply their money skills and habits to financial decisions. Where and when during childhood and adolescence do people acquire the foundations of financial capability? The Consumer Financial Protection Bureau (CFPB) researched the childhood origins of financial capability and well-being to identify those roots and to find promising practices and strategies to support their development.

This report, "Building blocks to help youth achieve financial capability: A new model and recommendations," examines "how," "when," and "where" youth typically acquire critical attributes, abilities, and opportunities that support the development of adult financial capability and financial well-being.[1] CFPB's research led to the creation of a developmentally informed, skills-based model.[2] The many organizations and policy leaders working to help the next generation become capable of achieving financial capability can use this new model to shape priorities and strategies. The financial capability developmental model can be used to:

- Refine existing programs and financial education resources.

[1] *Financial well-being: The goal of financial education*, Consumer Financial Protection Bureau (2015), *available at* consumerfinance.gov/reports/financial-well-being/.

[2] The research described in this report was conducted by the Corporation for Enterprise Development (CFED), under contract to CFPB. CFED's research team also included academic experts in financial capability and educational and developmental psychology from the University of Wisconsin–Madison and the University of Maryland, Baltimore County, as well as ICF International.

- Develop and test new and innovative financial education strategies.
- Make evidence-informed financial education policy and funding decisions.

Where we refer to some existing resources or programs in this report, they are provided as examples only. Inclusion of such resources should not be considered an endorsement or recommendation by the CFPB. There are many other possible programs that are not included that may also be effective.

This research is not an exhaustive overview of every factor in the lives of children and teens that contributes to financial capability. Indeed, many broad factors that contribute to adult financial well-being are outside the scope of this report. These include structural and contextual factors, such as:

- A community with abundant economic opportunity.
- Quality educational opportunities.
- Family income and wealth.
- Access to affordable, safe, and appropriate financial products and services.
- Quality employment opportunities.

This report identifies individual abilities and characteristics that financial education organizations and policy and community leaders can seek to influence. The CFPB continues to stress the importance of introducing key financial education concepts early, building on that foundation consistently throughout the K-12 years, and, along the way, involving parents, caregivers, and youth program providers as partners in preparing children and youth for skillful money management in the future.[3] This underscores the need for coordination and collective action guided by a shared understanding of how to promote financial capability.

---

[3] *Transforming the Financial Lives of a Generation of Young Americans: Policy Recommendations for Advancing K-12 Financial Education,* Consumer Financial Protection Bureau (2013), available at files.consumerfinance.gov/f/201304_cfpb_OFE-Policy-White-Paper-Final.pdf.

In addition to presenting a new financial capability developmental model, the CFPB created recommendations derived from its research to help those seeking new ideas and insights for delivering evidence-based, age-appropriate, and developmentally appropriate financial education policies and programs.

2. The developmental model

The financial capability developmental model provides a new evidence-based framework for understanding when, where, and how young people learn and develop the building blocks of financial capability. This research brings together what is known in a variety of disciplines to create recommendations that connect theory and practice in the financial education arena.[4]

The CFPB created the model to help financial education policy and program leaders to more effectively champion, design, and deliver financial education opportunities for American youth. Recognizing the general lack of research in this area, the CFPB focused on identifying the developmental origins of financial capability, as well as the most promising strategies and techniques for positioning youth for a life of adult financial capability.

Program leaders, parents, caregivers, financial educators, education policy and community leaders, and other stakeholders can use the financial capability developmental model to:

- Understand when, where, and how children acquire the building blocks of financial capability and apply that knowledge to evaluate the developmental fit of programs.
- Develop and test new and innovative financial education strategies.
- Refine existing financial education programs, resources, and curricula.

---

[4] See Appendix C for the research methodology underlying the findings and recommendations described in this report.

- Inform financial education policy.
- Identify age-appropriate financial capability milestones.

2.1 What is financial capability?

To understand how children form the building blocks of financial capability, it is important to define what that term means. Financial capability is the capacity, based on knowledge, skills, and access, to manage financial resources effectively.[5]

To be financially capable, individuals must be able to understand and apply financial knowledge. Individuals also have to acquire healthy money habits, norms, and rules of thumb[6] (automatic, mental shortcuts that simplify decision-making), as well as the ability to stick to a plan and successfully complete financial tasks.

Developing one's financial capability is an important stepping-stone on the path to adult financial well-being. People who have financial well-being can fully meet current and ongoing financial obligations, can feel secure in their financial future, and have the financial freedom to make choices that allow enjoyment of life.[7] Prior CFPB research has identified the abilities, attributes, and behaviors – the personal factors – that seem to support financial well-being in

---

[5] *Charter of the President's Advisory Council on Financial Capability*, U.S. Department of the Treasury (2010), *available at* treasury.gov/resource-center/financial-education/Documents/PACFC%202010%20Amended%20Charter.pdf.

[6] *Rules of thumb* are automatic, "go-to" responses we have to particular environmental cues that simplify the decision-making process and yield a reliably "good enough" solution. Also called cognitive heuristics, rules of thumb are mental shortcuts we use to quickly make decisions or resolve challenges when we have limited information.

[7] *Financial well-being: The goal of financial education*, Consumer Financial Protection Bureau (2015), *available at* consumerfinance.gov/reports/financial-well-being/.

adulthood.[8] These personal drivers of adult financial well-being include deliberate behaviors, such as engaging in financial research, setting financial goals and making concrete plans to meet them, and following through on financial decisions. To perform these behaviors well, one must have factual knowledge and financial skills or “know-how.” Effective navigation of day-to-day financial life also requires healthy money habits, norms, and rules of thumb. Adults with higher levels of financial well-being also seem to have some notable personal traits and attitudes. These include:

- Impulse control and the ability to delay gratification in service of future rewards.
- Perseverance in the face of obstacles.
- Belief in their ability to manage money and achieve financial goals (financial self-efficacy).[9]
- A tendency to make financial decisions in light of their own standards rather than in comparison to other people (internal frame of reference).

Factors beyond an individual’s control, such as structural opportunities, macroeconomic context, and family resources, of course play a significant role in financial outcomes and serve as critical enablers of an individual’s ability to put the financial skills they have developed to use. However, our research focuses on the areas where financial education efforts can most help to empower consumers – on the knowledge, skills, attitudes, and behaviors that may be influenced by financial education and other decision-making supports.

[8] A summary of these adult abilities, attributes, and behaviors is provided in Appendix B. For a full description of research methods and findings related to adult drivers of financial well-being, see *Financial well-being: The goal of financial education*, Consumer Financial Protection Bureau (2015), *available at* consumerfinance.gov/reports/financial-well-being/.

[9] *Financial self-efficacy* is confidence in one’s ability to manage finances and achieve financial goals without being overwhelmed, such as sticking to a spending plan.

2.2 What are the three youth building blocks of financial capability?

The CFPB conducted research to better understand how to best prepare youth for financial capability in adulthood. Little was widely known in the financial education field about how youth acquire the knowledge and skills, as well as the habits, norms, rules of thumb, and behaviors, that support adult financial capability. Our research suggests that the personal factors that comprise financial capability most likely all stem from three interlocking components of youth development: executive function, financial habits and norms, and financial knowledge and decision-making skills.

Children begin acquiring these building blocks of financial capability as early as preschool and continue to develop them as teens and young adults. Children and youth do not acquire the building blocks separately or in isolation. Rather, the building blocks are capabilities that support and catalyze the development of additional skills and capabilities.

1. **Executive function** – a set of cognitive processes used to plan for the future, focus our attention, remember information, and juggle multiple tasks successfully. Executive function helps manage the flow of information in our day-to-day lives and keeps mental distractions at bay. It encourages the development of personal traits and social/emotional skills used to achieve financial well-being, such as perseverance,[10] self-regulation,[11] and the ability to prioritize future gain over current desires.

2. **Financial habits and norms** – the values, standards, routine practices, and rules of thumb used to routinely navigate our day-to-day financial lives. One develops unconscious, automatic decision-making strategies based on attitudes, values, emotions, social norms, and contextual cues. Financial habits and norms come into play in financial capability

[10] *Perseverance* is the willingness to continue doing something that is difficult or that you failed at before.

[11] *Self-regulation*, in the context of financial capability, is the ability to understand and control your impulses, behavior, feelings, and thoughts in financial situations, and to respond wisely when facing financial challenges, for example, by persevering, or by delaying gratification (see *cognitive heuristics* footnote below).

because we use them to decide what is desirable, or even possible, in our lives, as well as to guide our day-to-day behaviors.

3. **Financial knowledge and decision-making skills** – familiarity with financial facts and concepts, as well as conscious and intentional decision-making skills. These include budding versions of skillful money management, financial planning, goal setting, and financial research.

Table 1, on the next page, provides a summary of each of the building blocks and illustrates how it contributes to financial capability in adulthood.

TABLE 1: THREE YOUTH BUILDING BLOCKS OF FINANCIAL CAPABILITY

	1 **Executive function**	2 **Financial habits and norms**	3 **Financial knowledge and decision-making skills**
What it is	Self-control, working memory,[12] problem-solving	Healthy money habits, norms, rules of thumb	Factual knowledge, research and analysis skills
What it supports in adulthood	Future orientation,[13] perseverance, planning and goal setting, general cognitive flexibility[14]	Decision shortcuts[15] for navigating day-to-day financial life and effective routine money management	Deliberate financial decision-making strategies, like financial planning, research, and intentional decisions
Examples of financial application in adulthood	Saving, setting financial goals, developing and executing budgets	Having a system to pay bills on time	Effective comparison shopping

[12] *Working memory* is the ability to hold onto and process several pieces of information at once. In the context of building blocks of financial capability, it is used in executive function when we briefly store and recall information to compare options and make decisions.

[13] *Future orientation* is having a long-term outlook and believing that there will be opportunities for you in the years ahead.

[14] *Cognitive flexibility* is the ability to think of different ways to solve a problem. It is a component of executive function that allows us to think creatively to address unexpected challenges.

[15] *Decision shortcuts* are routine responses we use to quickly make decisions or resolve challenges when we have limited information.

2.3 When do children and youth acquire the building blocks of financial capability?

The three building blocks of financial capability are typically acquired at different rates over three broad developmental stages: early childhood (ages 3–5), middle childhood (ages 6–12), and the teen and young adult years (ages 13–21). The ages linked to the developmental stages are only broad estimates because individuals vary in their maturity level at each age, and many of the attributes and abilities span multiple periods.

These three developmental stages are based on:

- When individuals are commonly capable of acquiring particular attitudes, habits, skills, and cognitive capacities.
- When young people typically gain access to financial decision-making experiences – for example, when do youth begin to receive an allowance, earn money, and make spending decisions?

None of the three buildings blocks of financial capability completely emerges during a single broad developmental age. Instead, children, teens, and young adults accumulate them in an overlapping fashion during early childhood, middle childhood, and as teens and young adults.

During early childhood (ages 3–5), executive function begins to develop rapidly through children's experiences with their environment. Executive function development continues through middle childhood and into adolescence and young adulthood.

During middle childhood (ages 6–12), as children have more experiences outside the home and begin to gain a sense of personal identity, financial habits and norms begin to form and continue to do so throughout adolescence. Children develop financial attitudes, habits, and norms by observing and interacting with parents and caregivers. They are also influenced by sources outside the home, including peers, people at school, community members, and media. This process is called financial socialization.[16]

During the teen years and young adulthood (ages 13–21), explicit financial knowledge and decision-making skills become more relevant, especially for youth who begin to make purchases on their own and take on financial responsibilities such as earning money, opening a bank account, or borrowing for education. Teens may act as “financial apprentices” to the adults in their lives, engage in experiential learning,[17] and begin to develop firsthand knowledge and skills that they will use to make intentional financial decisions.

Table 2 on the next page illustrates how the three building blocks of financial capability typically emerge over the three developmental stages.

1. *Executive function* develops significantly in early childhood and continues to develop throughout middle childhood and adolescence.

2. *Financial habits and norms* are the primary focus of financial development during middle childhood, though early norms and values begin to develop in early childhood and continue to grow into the teen and young adult years.

3. *Financial knowledge and decision-making skills* typically do not emerge until adolescence. However, children acquire underlying knowledge earlier. For example, they typically pick up basic numeracy in early childhood and simple money management knowledge and skills during middle childhood.

---

[16] *Financial socialization* occurs when youth pick up financial attitudes, habits, and norms from observing financial behaviors of parents, peers, educators, media, or other influencers.

[17] *Experiential learning* is the process of deriving meaning from direct or hands-on experiences. Experiential learning opportunities encourage children and youth to take initiative, make decisions, experience the results of their choices, and learn through reflection.

TABLE 2: PRIMARY DEVELOPMENTAL STAGES FOR YOUTH BUILDING BLOCKS OF FINANCIAL CAPABILITY

	1 **Executive function** *Self-control, working memory, problem-solving*	2 **Financial habits and norms** *Healthy money habits, norms, rules of thumb*	3 **Financial knowledge and decision-making skills** *Factual knowledge, research and analysis skills*
Early childhood (ages 3–5)	✓	Early values and norms	Basic numeracy
Middle childhood (ages 6–12)		✓	Basic money management
Adolescence and young adulthood (ages 13–21)	Development continues	Development continues	✓

2.4 How do children and youth acquire the building blocks of financial capability?

In this report, we refer to the processes and experiences for acquiring the building blocks of financial capability and the settings where children engage in financial development activities as pathways and platforms, respectively.

Pathways are the processes and experiences through which youth gain and develop the three building blocks of financial capability.

Major pathways include:

- Early experiences and environment.
- Parental influence.
- Financial socialization.
- Experiential learning.
- Direct explicit instruction.

Platforms are the locations or settings where children, teens, and young adults engage in activities that develop and reinforce financial capability attributes and abilities. Major platforms include:

- Home.
- Schools.
- Programs, including after-school, community-based, public, and private offerings.

Children gain knowledge and experience through a variety of pathways and platforms. Given that parents or caregivers are often the most influential agents of financial socialization, a child's home environment, for example, may be a particularly influential platform for stimulating executive function and the development of financial habits and norms.

Schools and communities are also critical platforms of financial socialization. A teen can learn financial knowledge and decision-making skills by attending a reality fair delivered in a community setting, or in a classroom. During a reality fair, teens role-play common adult financial challenges such as budgeting monthly income and paying bills, then review their decisions with a financial counselor.[18]

The kinds of pathways and platforms relevant to the building blocks of financial capability change as children age. For example, when children enter elementary school, the school setting becomes a powerful platform that may not have been available during early childhood. Once youth enter high school, finding a job or engaging in after-school programs and extracurricular activities can greatly expand available platforms and pathways.

Pathways can also emerge from partnerships between organizations. Schools can partner with banks or credit unions to establish school-based savings programs, which help students learn about the importance of saving and other money management topics. These bank-in-school programs use the pathway of experiential learning within the platform of a school setting.

Platforms can also be virtual. For example, computer and mobile technologies are sometimes used to simulate experiences or create role-playing activities much like reality fairs. Often, particular pathways are not limited to a single platform. For example, the pathway of direct instruction could be delivered via a school platform, by parents or caregivers in a home platform, or in a community platform by a program provider.

---

[18] *Reality Fairs,* The National Credit Union Foundation*, available at* ncuf.coop/how-we-help/real-solutions/experiential/reality-fairs.cmsx.

2.5 What are the building block competencies for each developmental stage?

This section details the specific competencies that children and youth typically develop during early childhood (ages 3–5), middle childhood (ages 6–12), and adolescence (ages 13–21). For more information, see Appendix A, which summarizes capability milestones at different developmental stages for all three building blocks of financial capability and links them to adult characteristics that research suggests support financial well-being.[19] This visual tool can help program providers as well as policy and community leaders envision the potential outcome goals of financial capability programming.

2.5.1 Financial capability competencies for early childhood (ages 3–5): Executive function develops rapidly, and very early financial knowledge and norms begin to form

Executive function is the primary building block most children acquire during early childhood. Executive function helps individuals plan, defer gratification, focus attention, remember information, and successfully juggle multiple tasks. These cognitive abilities support impulse control and future-oriented skills, which in turn provide a foundation for performing adult financial tasks such as setting financial goals, saving, and setting and following a budget.[20, 21]

---

[19] These adult characteristics are summarized in Appendix B and described in detail in *Financial well-being: The goal of financial education*, Consumer Financial Protection Bureau (2015), *available at* consumerfinance.gov/reports/financial-well-being/.

[20] Moffitt, Terrie E., Louise Arseneault, Daniel Belsky, Nigel Dickson, Robert J. Hancox, HonaLee Harrington, Renate Houts, Richie Poulton, Brent W. Roberts, Stephen Ross, Malcom R. Sears, W. Murray Thomson, and Avshalom Caspi, *A gradient of childhood self-control predicts health, wealth, and public safety,* 108(7) Proceedings of the National Academy of Sciences 2693–2698 (2011).

In addition to developing executive function, children as young as 3–5 years old can develop extremely basic knowledge and skills, which support personal financial management later in life.[22, 23] These include:

- Understanding and working with numbers such as basic numeracy.
- Learning to compare different characteristics of categories of objects (shiny versus dull, big versus small).
- Familiarity with coins.
- Learning about the concepts of buying and selling.
- Finding out about financial institutions.

Young children are also forming attitudes about consumerism even before they start school. For instance, they may recognize store names, and they may see advertisements targeted to them.

Executive function typically increases dramatically during the first 5 years of life. In the years before children enter kindergarten, they are actively learning and developing within a unique and dynamic context shaped by their early experiences, environment, and interactions with their primary caregivers. Executive function development during these early years is particularly important because it facilitates the development of higher-level abilities later in life. These

---

[21] Lynch Jr., J. G., R. G. Netemeyer, S. A. Spiller, and A. Zammit, *A Generalizable Scale of Propensity to Plan: The Long and the Short of Planning for Time and for Money,* 37(1) Journal of Consumer Research 108–128 (2010).

[22] Holden, Karen, Charles Kalish, Laura Scheinholtz, Deanna Dietrich, and Beatriz Novak, *Financial Literacy Programs Targeted on Pre-School Children: Development and Evaluation*, La Follete School Working Papers (2009), *available at* http://digital.library.wisc.edu/1793/36314.

[23] Whitebread, David, and Sue Bingham, *Habit Formation and Learning in Young Children* (London: Money Advice Service 2013).

abilities include skills such as financial planning and accurate comparison of multifeatured financial products.[24]

External factors such as socioeconomic circumstances, limited access to a wide range of economic opportunities, and early experiences with adversity (e.g., abuse, neglect, or other stressors) can negatively affect executive function development.[25] For example, a child who grows up in an environment that does not reward delayed gratification[26] may not develop that skill. At the same time, studies have shown that interventions can ameliorate the impact of environmental stressors on executive function development and that children with the poorest executive functioning prior to intervention show the greatest improvement.[27, 28, 29, 30]

---

[24] Gathercole, Susan E., Susan J. Pickering, Camilla Knight, and Zoe Stegmann, *Working memory skills and educational attainment: evidence from national curriculum assessments at 7 and 14 years of age*, 18(1) Applied Cognitive Psychology 1–16 (2004).

[25] Blair, Clancy, and Cybele C. Raver, *Child Development in the Context of Adversity: Experiential Canalization of Brain and Behavior*, 67(4) American Psychologist 309–318 (2012).

[26] *Delayed gratification* is the willingness to forgo or postpone an immediate reward or benefit in favor of a future benefit. Along with a future orientation and impulse control, it supports self-regulation.

[27] Klingberg, T., E. Fernell, P. J. Olesen, M. Johnson, P. Gustafsson, K. Dahlström, and H. Westerberg, *Computerized Training of Working Memory in Children with ADHD—A Randomized, Controlled Trial* 44(2) Journal of the American Academy of Child and Adolescent Psychiatry 177–186 (2005).

[28] Lillard, Angeline, and Nicole Else-Quest, *Evaluating Montessori Education*, 313 Science 1893–1894 (2006).

[29] Diamond, Adele, *Executive Functions*, 64(1) Annual Review of Psychology 135–168 (2013).

[30] Diamond, A., *Activities and Programs That Improve Children's Executive Functions*, 21(5) Current Directions in Psychological Science 335–341 (2012).

Table 3, below, summarizes the primary and secondary elements of the building blocks of financial capability that develop during early childhood.

TABLE 3: WHAT HAPPENS IN EARLY CHILDHOOD (AGES 3–5)

Primary
Executive function develops ▪ Supports future-oriented behaviors ▪ Provides cognitive basis for financial reasoning skills ▪ Supports self-control and perseverance ▪ Forms a foundation for ability to follow through
Secondary
Basic numeracy develops ▪ Provides the foundation for applied math skills ▪ Is integral to skillful money management ▪ Is integral to financial analysis skills Financial attitudes begin to develop ▪ Examples: future orientation and delayed gratification ▪ Support ongoing development of executive function and later-in-life financial skills
How it happens: pathways and platforms
▪ Children learn through observation; direct, explicit instruction; and practice. ▪ Home, day care, or preschool are the most common platforms. ▪ Parents and other caregivers have the most influence.

Table 4, below, provides a checklist of financial capability milestones relevant to early childhood.

TABLE 4: CAPABILITY MILESTONES FOR EARLY CHILDHOOD

1. Executive function	2. Financial habits and norms	3. Financial knowledge and decision-making skills
▪ Does the child begin to demonstrate self-regulation, persistence, and focus? ▪ Can the child demonstrate these qualities when using and managing limited resources like time, money, treats, or belongings?	▪ Has the child developed basic values and attitudes around keeping (saving) and using (consuming) resources?	▪ Does the child have early numeracy skills like counting and sorting? ▪ Does the child grasp basic financial concepts like money and trading?

2.5.2 Financial capability competencies for middle childhood (ages 6–12): Financial habits and norms are readily acquired, and executive function continues to develop

During middle childhood, children typically begin to acquire money habits, norms, and values through a process called financial socialization. [31] The financial habits and norms developed during this developmental stage will influence many of the financial behaviors and habits as adults. [32] During this stage, children also continue to develop executive function and related

[31] Whitebread, David, and Sue Bingham, *Habit Formation and Learning in Young Children* (London: Money Advice Service 2013).

[32] Danes, Sharon M., *Parental Perceptions of Children's Financial Socialization*, 5 Journal of Financial Counseling and Planning 127–146 (1994).

skills. For example, youth may begin to make future plans for use of an allowance. Youth also begin to acquire basic financial knowledge that they will use to make purposeful financial decisions as adults.

During this developmental stage, children begin to form independent identities as they interact more frequently with people outside of their home environment. This lays the groundwork for developing a financial identity through the acquisition of financial values, habits, and norms. This focus on the development of financial habits and norms in middle childhood goes beyond learning basic financial lessons.

Children in this developmental stage might receive an allowance or money as a gift, or perhaps have some input on the family's spending decisions.[33] As children have more firsthand experiences with acquiring, spending, and perhaps even saving small amounts of money, they begin to develop their sense of what is normal or appropriate in money management.

Although financial socialization occurs through many different platforms, including school, media, and peers, parents or caregivers are typically the primary agents of financial socialization during elementary and middle school ages.[34] Financial socialization occurs through implicit observation and through direct instruction.

Parents of elementary schoolers can model healthy choices, behaviors, and attitudes as they engage in day-to-day and monthly activities, such as paying bills or grocery shopping. Children observe these actions and implicitly draw conclusions and internalize financial behaviors and norms – for example, always taking a shopping list to the grocery store.

Parents also provide explicit, direct financial lessons when they set standards and expectations – for example, telling children they must save a portion of their allowance (or cash they may earn

[33] Whitebread, David and Sue Bingham, *Habit Formation and Learning in Young Children* (London: Money Advice Service 2013).

[34] Beutler, Ivan, and Lori Dickson, *Handbook of Consumer Finance Research*, Consumer Economic Socialization 83–102 (New York: Springer 2008).

or receive as gifts) because it is important to set aside a portion of income before spending any of it. Schools are a platform where children can acquire explicit financial knowledge and resource management skills.

During this developmental stage, children usually begin to grasp abstract concepts that underpin personal finance, such as managing a household budget. In middle childhood, youth are more fully able to understand the future and can determine the timing of things happening months away.[35, 36]

Executive function and basic money management skills are also continuing to develop during middle childhood. Youth are beginning to grasp simple constructs, such as investments of time or money, and consider trade-offs. For example, a youth in middle childhood who is allowed to decide whether to spend allowance every week or to save for a large item is practicing critical goal-oriented financial planning.

Table 5 on the next page summarizes the primary and secondary elements of financial capability that develop during middle childhood.

---

[35] Scheinholtz, Laura, Karen Holden, and Charles Kalish, *Cognitive Development and Children's Understanding of Personal Finance*, Consumer Knowledge and Financial Decisions: Lifespan Perspectives 29–47 (New York: Springer 2012).

[36] Whitebread, David, and Sue Bingham, *Habit Formation and Learning in Young Children* (London: Money Advice Service 2013).

TABLE 5: WHAT HAPPENS IN MIDDLE CHILDHOOD (AGES 6–12)

Primary
Financial habits and norms develop ▪ Frugality versus materialism ▪ Value of saving and planning ahead ▪ Reliance on own values when making spending decisions Financial self-confidence (financial self-efficacy[37]) grows ▪ Gaining experience managing resources ▪ Developing attitudes toward financial institutions
Secondary
Executive function continues to develop ▪ Supports financial analysis skills, planning and goal setting, conscientiousness, and grit Applied math and basic financial skills develop ▪ Helps money management ▪ Helps financial knowledge
How it happens: pathways and platforms
▪ Financial socialization[38] ▪ Home is still most important, but community, media, peers, and school gain influence ▪ Implicit learning dominates, but explicit learning opportunities increase

[37] *Financial self-efficacy* is confidence in one's ability to manage finances and achieve financial goals without being overwhelmed, such as sticking to a spending plan.

[38] *Financial socialization* occurs when youth pick up financial attitudes, habits, and norms from observing financial behaviors of parents, caregivers, peers, educators, media, or other influencers.

Table 6, below, provides a suggested checklist of financial capability milestones relevant to middle childhood.

TABLE 6: CAPABILITY MILESTONES FOR MIDDLE CHILDHOOD

1. Executive function	2. Financial habits and norms	3. Financial knowledge and decision-making skills
▪ Does the child show the ability to plan ahead and delay gratification? ▪ Does the child show future orientation?	▪ Does the child begin to show a positive attitude toward savings, frugality, planning, and self-control? ▪ Does the child begin to have positive financial habits, like planning and saving? ▪ Can the child make spending and saving decisions aligned with his or her goals and values? ▪ Is the child self-confident about completing age-appropriate financial tasks?	▪ Does the child understand core basic financial processes and concepts? ▪ Has the child successfully managed money or other resources to reach his or her own goals?

2.5.3 Financial capability competencies for teens and young adults (ages 13–21): Independent financial decision-making increases, and executive function continues to mature

During adolescence and young adulthood, many individuals start making consequential financial decisions. For example, teens may make small and bigger-ticket purchases, become employed, open bank accounts, sign leases, get their first credit cards, and grapple with paying for college. Thus, explicit financial knowledge and decision-making skills become increasingly personally relevant, perhaps for the first time in their lives. These new opportunities to earn, save, spend, and borrow money give youth the opportunities to hone their financial decision-making skills. In addition, teens start to learn and begin to make use of routine financial decision-making shortcuts, which we call rules of thumb. While teens are developing new knowledge and skills about money, how they apply that knowledge is influenced by the habits, attitudes, and executive function skills they have begun to develop in earlier stages.

During the teen years, cognitive faculties continue to strengthen. This prepares teens and young adults to understand and use real-world and abstract financial knowledge and concepts, and to develop and practice financial research and decision-making skills. Youth at this stage can learn how to find and recognize reliable financial information and how to compare financial products. Research into adult financial well-being suggests these are critical skills.

To successfully navigate adult financial life, one needs to be able to do effective, purposeful financial research in order to analyze options and to be able to figure out how to execute on financial decisions. This set of skills, called financial ability, is a key element of adult financial literacy and capability.[39]

Executive function continues to mature during this developmental stage, but some aspects are fully formed as early as age 15. Adolescents consistently demonstrate a stronger orientation to the future than younger children do, and they tend to plan ahead more thoroughly and consistently.[40] However, other executive function skills, like self-regulation and the ability to stay focused, seem to develop at a slower pace and do not reach maturity until early adulthood. Therefore, teens may display adult-level cognition in some settings but may have difficulty controlling impulses, particularly during highly tempting situations. For example, a teen may get an after-school job intending to save for a car, yet decide to dip into savings to pay for a concert ticket if friends are going.

As they encounter new experiences, teens begin to develop more sophisticated strategies to

---

[39] For more information on the concept of "financial ability," see section 4.2.1 of *Financial well-being: The goal of financial education*, Consumer Financial Protection Bureau (2015), *available at* consumerfinance.gov/reports/financial-well-being/.

[40] Steinberg, Laurence, Sandra Graham, Lia O'Brien, Jennifer Woolard, Elizabeth Cauffman, and Marie Banich, *Age Differences in Future Orientation and Delay Discounting*, *80*(1) Child Development 28–44 (2009).

assess and weigh decisions. By young adulthood, youth tend to have higher levels of self-control than they did as teens, in part because they have a stronger capacity to resist the pull of social and emotional influences and to focus on long-term goals.[41]

Financial independence typically increases as youth enter their teen years and begin to make consequential financial decisions on their own. This increases the salience of financial knowledge, skills, and decision-making abilities. For example, they may have learned about interest rates in a prior financial education class and now might be evaluating interest payments for a credit card, auto loan, or student loan.

Teens and young adults may engage in more formal money management and financial decisions with increasingly higher consequences as they gain real-world financial knowledge and familiarity with financial products and institutions. Through increased formal money management experiences, youth can develop and practice financial skills and decision-making strategies in relevant, real-life situations – preferably with guidance and feedback from knowledgeable adults in their lives. Any mistakes made within this safe environment can lead to valuable learning that creates a “frame of reference” for future financial decisions. This practice helps youth achieve greater financial capability.

The financial decisions young adults make can help them build a positive financial future, or lay the groundwork for financial struggles. Establishing routines and rules of thumb can build teens’ financial self-confidence and their belief in their ability to successfully complete financial tasks (financial self-efficacy). Teens who have begun to develop financial self-efficacy are more likely to act on the financial knowledge and skills they have learned because they believe it will be worthwhile to do so. Less favorable results might be expected for those who head into young adulthood without having acquired the building blocks of financial capability and for those who lack guidance and support from knowledgeable adults. Without support and guidance, teens and young adults can head down a path of poor financial decisions that lead to worsening options and set off a spiral of financial disadvantage into adulthood. For example, a young adult can

[41] Romer, Daniel, Angela L. Duckworth, Sharon Sznitman, and Sunhee Park, *Can Adolescents Learn Self-Control? Delay of Gratification in the Development of Control over Risk Taking*, 11(3) Prevention Science 319–330 (2010).

open a credit card account, fall behind on monthly credit card payments, and end up with poor credit, especially if the young adult does not have the savings or resources to cushion those financial stumbles.

Schools are an important platform for helping teens improve their financial knowledge and decision-making skills. However, as of 2016, only 17 states require high schools students to pass a personal finance class in order to graduate.[42] Youth employment programs can be another important platform for helping teens acquire some of the building blocks of financial capability. The CFPB and the Department of Labor are helping municipalities integrate financial knowledge and skill-building services into existing youth employment-training programs.[43]

As teens increasingly interact with the financial world and financial decision-making, they begin to develop routine rules of thumb they will rely upon to navigate their day-to-day financial lives as adults. A teen whose parents put $40 into a savings jar every payday might routinely set aside money when she earns her paycheck. Practicing financial behaviors and making and reflecting on deliberate financial decisions can help a teen develop these automatic decision-making skills. These routine behaviors can then become habits.

---

[42] *Survey of the States: The state of K-12 economic and financial education in the United States*, Council for Economic Education (2016), *available at* http://councilforeconed.org/policy-and-advocacy/survey-of-the-states/.

[43] For more information, see *Getting young people on the path to financial success*, Consumer Financial Protection Bureau (2014), *available at* consumerfinance.gov/about-us/blog/getting-young-people-on-the-path-to-financial-success/; see also *Building financial capability in youth employment programs: Insights from a roundtable with practitioners,* Consumer Financial Protection Bureau (2014), *available at* http://files.consumerfinance.gov/f/201408_cfpb_report_financial-capability-in-youth-employment-programs.pdf.

Table 7, below, summarizes the primary and secondary elements of financial capability that develop during adolescence and young adulthood.

TABLE 7: WHAT HAPPENS IN ADOLESCENCE AND YOUNG ADULTHOOD (AGES 13–21)

Primary
Financial knowledge and decision-making skills grow as they become more personally relevant ▪ Knowledge and skills are strengthened through making and reflecting on consequential decisions ▪ Support deliberate, intentional problem-solving
Secondary
Executive function continues to develop ▪ Supports critical thinking, focus, and perseverance Financial habits and norms continue to develop ▪ Shortcuts for automating financial decisions crystallize with repeated experience ▪ Habits and attitudes for managing money become part of individual identity
How it happens: pathways and platforms
▪ Schools, formal instruction ▪ Structured experiential learning[44] activities ▪ Real-life financial decisions, ideally guided by adult oversight

[44] *Experiential learning* is the process of deriving meaning from direct or hands-on experiences. Experiential learning opportunities encourage children and youth to take initiative, make decisions, experience the results of their choices in a safe environment, and learn through reflection.

Table 8, below, provides a checklist of financial capability milestones relevant to adolescence and young adulthood.

TABLE 8: CAPABILITY MILESTONES FOR ADOLESCENCE AND YOUNG ADULTHOOD

1. Executive function	2. Financial habits and norms	3. Financial knowledge and decision-making skills
▪ Does the teen demonstrate critical-thinking skills? ▪ Does the teen demonstrate future orientation? ▪ Has the teen demonstrated the ability to plan ahead and delay gratification?	▪ Does the teen have a positive attitude toward planning, saving, frugality, and self-control? ▪ Does the teen demonstrate positive money management habits and decision-making strategies? ▪ Can the teen make spending and saving decisions aligned with his or her goals and values? ▪ Does the teen demonstrate appropriate financial self-efficacy?	▪ Does the teen grasp advanced financial processes and concepts? ▪ Can the teen successfully manage money or other resources to reach his or her own goals? ▪ Can the teen identify trusted sources of information and process that information?

2.6 Why do developmental windows present the best opportunities for youth to acquire the building blocks of financial capability?

Every day as adults, we make financial decisions using money habits, norms, and rules of thumb (automatic mental shortcuts that simplify the decision-making process). Youth begin to develop those financial habits and ideas in early childhood. The CFPB's financial capability developmental model describes how young people typically build the attitudes, habits, skills, and cognitive abilities that they will need to effectively manage their financial resources and achieve well-being as adults. This developmental model recognizes that youth gather the building blocks of financial capability over time as they grow and encounter new experiences. The model is fluid, reflecting the fact that individuals are unique and our social and environmental influences shape each of us.

The developmental model highlights the windows of opportunity when youth typically, and most readily, acquire the building blocks of financial capability. These touch points are periods during which individuals are typically developmentally capable of learning a skill or attitude and are most commonly open to learning it. The cognitive and environmental factors that together make a certain age ideal for absorbing a particular skill or behavior might not readily reappear again later in life, making these capabilities not nearly so easy to learn outside the window. In other words, developing the financial capability building blocks is much more difficult without the optimal alignment of internal readiness and external environmental learning conditions that typically occur during the developmental windows.

For example, teens who receive an allowance, and guidance in how to use it, may gain confidence in their ability to make spending decisions. Alternatively, teens who are never given an opportunity to discuss or make spending decisions may feel unprepared or nervous about money. Teens who stay on that cascade or pathway may grow up thinking they are bad with money, or they might habitually avoid making money decisions. Changing those beliefs and habits may be difficult once those teens become adults. Therefore, a timely youth program that helps them practice making spending decisions could start them on a path toward skillful money management. Instead of forming the habit of avoiding financial decisions, teens would instead develop a healthier financial belief, such as a confidence in making spending decisions aligned with their goals and values.

This research stresses the importance of leveraging the developmental windows and the responsibility parents, caregivers, community organizations, and school leaders share as they work together to ensure that all youth have the opportunity to acquire the building blocks of financial capability. The recommendations provided in the following section are intended to orient a range of actors, including financial education program developers, schools, and policy and community leaders, toward a set of common strategies so that no one practitioner needs to tackle them all. For youth who may not be developing the building blocks at home through their parents or caregivers, schools, after-school programs, and community organizations can provide support and opportunities. Alternatively, youth who are not engaged in the school environment may develop the building blocks with support from community organizations and parents or caregivers. By working together, we can give all children opportunities to create a foundation for adult financial capability.

3. Recommendations for applying the financial capability developmental model

Previously, the CFPB stressed the importance of starting financial education early and continuing to build on that foundation throughout childhood and young adulthood, including requiring financial education in schools.[45] Building on the earlier recommendations, the CFPB developed a set of four recommendations that program leaders, financial educators, policymakers, and other stakeholders can use to apply the financial capability developmental model in their work. The recommendations reflect the most promising financial capability strategies and approaches based on our research and analysis.[46]

The four recommendations are:

1. For children in early childhood, focus on developing executive function.
2. Help parents and caregivers to more actively influence their child's financial socialization.

---

[45] *Transforming the Financial Lives of a Generation of Young Americans: Policy Recommendations for Advancing K-12 Financial Education*, Consumer Financial Protection Bureau (2013), available at files.consumerfinance.gov/f/201304_cfpb_OFE-Policy-White-Paper-Final.pdf.

[46] The research process underlying these recommendations is available in Appendix C.

3. Provide children and youth with financial experiential learning opportunities.

4. Teach youth financial research skills.

Within each recommendation, you will find:

- An explanation of why the recommendation helps build financial capability.
- Examples from the field.
- Potential strategies for putting the recommendation into place.

Each recommendation contributes to financial capability, but, when applied together, they can have a greater impact. Young people continually acquire and develop attributes and abilities that influence how they will navigate the financial challenges and opportunities they encounter as adults. Youth do not pick up the building blocks of financial capability separately or in isolation. The development of some building blocks of financial capability support and catalyze the development of others. For instance, improvements in executive function during early childhood lay the foundation for financial behaviors and skills people use later in life to plan and set goals.

To build the strongest possible base for adult financial capability and well-being, schools, parents, and policy and education leaders can work in concert to ensure that all children have the chance to acquire each of the building blocks. Introducing key financial education concepts early and consistently offering financial education throughout the K-12 years is critical. Parents and caregivers also contribute significantly when they prepare children and youth for skillful money management.[47]

The four recommendations illustrate ways to employ the developmental model in financial education and youth programs, policies, and initiatives, and also highlight promising strategies, approaches, and activities for youth.

---

[47] *Transforming the Financial Lives of a Generation of Young Americans: Policy Recommendations for Advancing K-12 Financial Education*, Consumer Financial Protection Bureau (2013), available at files.consumerfinance.gov/f/201304_cfpb_OFE-Policy-White-Paper-Final.pdf.

Financial education curriculum creators and program providers can use these recommendations to evaluate current offerings and as they produce and test new programs, lessons, and activities. Policy and community leaders can use the recommendations to promote developmentally appropriate financial education initiatives.

3.1 Recommendation one: For children in early childhood, focus on developing executive function skills

3.1.1 What is executive function?

The Center on the Developing Child at Harvard University defines executive function as "mental processes that enable us to plan, focus attention, remember instructions, and juggle multiple tasks successfully. Just as an air traffic control system at a busy airport safely manages the arrivals and departures of many aircraft on multiple runways, the brain needs this skill set to filter distractions, prioritize tasks, set and achieve goals, and control impulses."[48]

3.1.2 Why is executive function important to financial capability?

People use executive function skills to set goals, plan, save for the future, and stick to a budget. Developing healthy executive function is especially important during the preschool years because it lays a critical foundation for further cognitive, attitudinal, and skill development during middle childhood and adolescence, and into young adulthood. Children between the ages

---

[48] To learn more about executive function, see *Executive Function & Self-Regulation*, Center on the Developing Child, Harvard University, *available at* http://developingchild.harvard.edu/science/key-concepts/executive-function/.

of 3 and 5 typically show dramatic growth in executive function skills. That suggests early childhood is a crucial developmental stage during which there is a window of opportunity to focus on executive function development.

3.1.3 Executive function in action

Research suggests that programs involving the frequent practice of executive function skills in multiple contexts have the greatest impact.[49, 50] This would include programs that encourage children to plan and think ahead: for example, before a play session, asking children what toys they plan to use or which activity they plan to complete, and then, when playtime ends, asking them to evaluate how well they stuck to their plan. Interventions that become progressively more challenging over time, such as providing increasingly difficult puzzles or sing-along rhymes, also help develop executive function.[51]

While research suggests that early adversity, including poverty, abuse, and other stressors, may affect executive function development in young children, studies show that children with the poorest executive functioning exhibit the greatest improvement from interventions.[52, 53, 54]

---

[49] Klingberg, Torkel, Elisabeth Fernell, Pernille J. Olesen, Mats Johnson, Per Gustafsson, Kerstin Dahlström, Christopher G. Gillberg, Hans Forssberg, and Helena Westerberg, *Computerized Training of Working Memory in Children with ADHD—A Randomized, Controlled Trial*, 44(2) Journal of the American Academy of Child and Adolescent Psychiatry 177–186 (2005).

[50] Lillard, Angeline, and Nicole Else-Quest, *Evaluating Montessori Education*, 313 Science 1893–1894 (2006).

[51] Diamond, Adele, *Executive Functions*, 64(1) Annual Review of Psychology 135–168 (2013).

[52] Blair, Clancy, and C. Cybele Raver, *Child Development in the Context of Adversity: Experiential Canalization of Brain and Behavior*, 67(4) American Psychologist 309–318 (2012).

[53] Tomalski, Przemyslaw, and Mark H. Johnson, *The effects of early adversity on the adult and developing brain*, 23(3) Current Opinion in Psychiatry 233–238 (2010).

[54] Diamond, Adele, *Activities and Programs That Improve Children's Executive Functions*, 21(5) Current Directions in Psychological Science 335–341 (2012).

3.1.4 Building executive function in a financial context

Helping children develop self-regulation, the ability to focus, and impulse control is likely to benefit them in a variety of different domains, including nutrition and health, public safety, and academic achievement.[55] Likewise, generalized executive function will also help with financial capability even if financial topics are not used. However, teaching and practicing executive functions within financial contexts may better position youth to acquire other building blocks as they age, such as financial habits and norms or decision-making skills.

Incorporating financial experiences and concepts into early childhood activities aimed at boosting executive function can therefore serve two related purposes. First, children can learn basic financial concepts such as working for pay, and trading, sharing, or spending money or resources. Second, they may begin to acquire rudimentary financial habits and norms as they watch parents and caregivers make financial decisions and transactions.

Examples of executive function training in financial contexts include make-believe play activities, such as having children act out scenes in which they pretend to go to the bank, make a grocery list and go shopping, or get rewarded to run a business or do a job. Play-based learning activities work well because they help children develop self-regulatory skills while being actively engaged in an activity that interests them.[56] An added benefit is that children who encounter a problem in a play-based environment show more flexibility and perseverance in their problem-solving.[57]

---

[55] Moffitt, Terrie E., Louise Arseneault, Daniel Belsky, Nigel Dickson, Robert J. Hancox, HonaLee Harrington, Renate Houts, Richie Poulton, Brent W. Roberts, Stephen Ross, Malcom R. Sears, W. Murray Thomson, and Avshalom Caspi, *A gradient of childhood self-control predicts health, wealth, and public safety,* 108(7) Proceedings of the National Academy of Sciences 2693–2698 (2011).

[56] Whitebread, David, and Sue Bingham, *Habit Formation and Learning in Young Children* (London: Money Advice Service 2013).

[57] Pellegrini, Anthony D., and Kathy Gustafson, *The Nature of Play: Great Apes and Humans Boys' and Girls' Uses of Objects for Exploration, Play and Tools in Early Childhood* (New York: Guilford Press 2005).

In addition to developing executive function, play-based activities also contribute to financial socialization. Preschool children can begin to understand concepts such as:

- People use money to purchase things.
- A person earns money by working.
- Some people save money over time to purchase things later.

3.1.5 Executive function practices at home

The home is an important platform,[58] and parents and caregivers are a critical pathway[59] for providing activities that build executive function. Organizations that work with parents can share ideas and encourage parents to do age-appropriate activities with their children that involve making resource or financial management decisions, such as creating a budget or making trade-offs around consumption. Parents who engage their children in planning and decision-making lay the foundation for early financial socialization. Parents can convey and reinforce expectations about behaviors such as sharing or waiting to make purchases until one has saved enough money.

The Center on the Developing Child at Harvard University provides a number of activities that parents and caregivers can do with 3- and 5-year-olds to strengthen executive function, including imaginary play, storytelling, games and songs, and cooking together.[60] These engaging activities help strengthen preschoolers' ability to self-regulate and match their mental and physical actions to a larger goal.

---

[58] *Platforms* are the locations or settings where youth engage in activities to develop and reinforce financial capability attributes and abilities. Major platforms include home, schools, and programs run by community organizations.

[59] *Pathways* are the processes and experiences through which youth gain and develop the building blocks of financial capability. Major pathways include early experiences and environment, parental influence, financial socialization, experiential learning, and direct instruction.

[60] *Executive Function Activities for 3- to 5-year-olds*, Center on the Developing Child, Harvard University*, available at* http://developingchild.harvard.edu/wp-content/uploads/2015/05/Executive-Function-Activities-for-3-to-5-year-olds.pdf.

3.2 Recommendation two: Help parents and caregivers to more actively influence their child's financial socialization

3.2.1 What is financial socialization?

Financial socialization is an ongoing process by which children and youth develop the financial habits and norms that guide their financial behaviors as adults.[61] Financial socialization occurs through many different pathways and platforms, including parents, caregivers, school, media, and peers. Financial socialization can happen from direct instruction from teachers or parents but is typically shaped by observing the behaviors and choices made by adults and peers in the child's life.

3.2.2 Why is parent-driven financial socialization important to financial capability?

Parents and caregivers play a critical role in shaping the values, norms, and habits of their children, especially younger children.[62] In elementary school, children observe their parents making day-to-day or month-to-month choices, such as paying bills, deciding what to buy at a grocery store, or discussing financial concerns or issues. Parental or caregiver guidance and oversight can play a significant role in setting standards and expectations, especially as children move into later childhood, the preteen years, and beyond.

---

[61] Danes, Sharon M., *Parental Perceptions of Children's Financial Socialization*, 5 Financial Counseling and Planning 127–146 (1994).

[62] Ward, Scott, *Consumer Socialization*, 1(2) Journal of Consumer Research 1–14 (1974).

3.2.3 Financial socialization in action

Organizations can engage parents and caregivers as active participants in the financial socialization of their children, starting in preschool and continuing through adolescence. Children, especially at earlier ages, learn from observing adults' interactions regarding money, as well as from direct, explicit instruction. Youth financial capability programs have opportunities to help parents take a more active role in their children's financial socialization. Programs and educators can encourage parents and caregivers to help children develop healthy financial habits and norms by:

- Involving children in appropriate family financial activities, such as setting a budget or making small spending decisions, and answering children's questions about money topics.
- Connecting parents and caregivers to services and resources that can help them improve their own financial capability and well-being so they are better able to model positive attitudes and behaviors for their children.

Organizations can also help parents and caregivers build confidence in their ability to share healthy financial habits and norms by emphasizing the importance of the financial skills and values that parents already possess through a "strengths-based" approach.[63]

In early and middle childhood, children begin to develop financial habits and norms, making this a good window of opportunity for parents to teach and model financial behaviors. Teens may be more independent and increasingly make routine financial decisions on their own. During adolescence, teens begin to establish their own financial identities, based in large part on the attitudes and values they learned during early and middle childhood. Although attitudes and values take root in early and middle childhood, they continue to be refined through the teen and young adult years. Parents continue to play a role in reinforcing financial attitudes and

---

[63] *A strength-based approach* to financial education focuses on having parents first share the financial habits and norms they already possess, which can build parents' confidence in their own ability to role model healthy financial habits and norms. It focuses first on what parents already know and what is

behaviors and setting expectations, but peers become an increasingly important influence on financial socialization, as both a source of support and a source of peer pressure. Even as children approach young adulthood, parents and caregivers are in a unique position to support the development of financial capability.

Children do not develop financial habits and norms at a single point in time or around a single financial behavior. Instead, they gather attitudes and behaviors through exposure to financial behaviors, personal financial experiences, and financial education. Parents and other caregivers can play an instrumental role in their children's financial socialization and cognitive development over many years. Programs working with parents will benefit from seeking out multiple touch points and viewing parental engagement as an ongoing process.

3.2.4 Leverage everyday activities to drive financial socialization

Programs can encourage parents and caregivers to view regular activities, such as dining out, buying gas, grocery shopping, and paying the monthly bills, as opportunities to discuss money and model financial behaviors with their children starting in early childhood. The goal of these interactions should be to impart healthy values and norms around financial behaviors, such as spending money wisely, saving, planning, and controlling impulses when it comes to money.

Parents can also:

- Actively engage children in everyday financial behaviors.
- Help develop children's habits and decision-making rules of thumb through day-to-day teachable moments.
- Encourage their children to make money choices in line with their own goals and values.

A number of CFPB resources and practical suggestions to support parents and caregivers in these efforts are available online at "Money as you grow" (consumerfinance.gov/money-as-you-grow).

3.2.5 Improve the financial well-being of parents and caregivers to support them as role models

There are a growing number of dual, or two-generation, programs focused on improving educational or health outcomes for children as well as economic outcomes for parents.[64] By equipping parents or other primary caregivers with the knowledge and tools they need and connecting them with social supports, these programs help create home environments that encourage youths' cognitive and social/emotional development. If the services also improve the financial capability of parents, these programs can help them model positive financial attitudes and behaviors for their children.

Some two-generation programs also help parents and caregivers improve interactions with their children. Studies have shown that trust and parental warmth affect the quality of parent-child interactions around money. In fact, the quality of parental interactions may be at least as important as the content of parental interactions.[65, 66] Therefore, it may be particularly effective to include guidance around financial socialization in programs that focus on strengthening the parent-child relationship.

Two-generation approaches could have a powerful impact on the financial socialization of children. However, not all financial capability programs or initiatives have the experience or resources necessary to develop programming targeted at parents. Those lacking this option can look for ways to partner with other organizations that offer those services or resources to parents.

---

[64] Mosle, Anne, and Nisha Patel, *Two Generations, One Future: Moving Parents and Children Beyond Poverty Together*, The Aspen Institute (2012), *available at* aspeninstitute.org/sites/default/files/content/docs/ascend/Ascend-Report-022012.pdf.

[65] Maccoby, E. E., and J. A. Martin, *Socialization in the Context of the Family: Parent-Child Interaction*, Handbook of Child Psychology 1–103 (Hoboken, NJ: Wiley 1983).

[66] Davidov, Maayan, and Joan E. Grusec, *Untangling the Links of Parental Responsiveness to Distress and Warmth to Child Outcomes*, 77(1) Child Development 44–58 (2006).

In a survey of parents and children, fewer than one in four parents felt confident in their ability to talk about finances with their children.[67] This lack of confidence may be more pronounced in economically vulnerable families, where parents may feel that their own financial struggles diminish their ability to have positive financial discussions with their children.[68]

Using a strength-based approach to engage parents in financial socialization may help lower parents' anxiety about discussing finances with their children. Strength-based approaches typically view individuals as being resourceful and resilient, and therefore these approaches seek to build on what parents and caregivers already know and what is important to them to help their children succeed.[69] This means starting the engagement with topics parents are comfortable with and tasks they are good at, then providing suggested actions that build on their expertise and strengths.

Research suggests that even parents who struggle to make ends meet are successfully managing resources. In fact, a more in-depth view of the lives of economically vulnerable families shows they lead complex financial lives, often balancing and navigating multiple kinds of resources and income streams simultaneously.[70] Thus, programs that facilitate parental engagement, especially with economically vulnerable families, should capitalize on this by focusing on parents' success in "resource management" rather than on parents' financial knowledge.

---

67 *5th Annual Parents, Kids & Money Survey*, T. Rowe Price (2013), *available at* https://corporate.troweprice.com/Money-Confident-Kids/images/emk/2013-PKM-Survey-Results-Report-FINAL-0326.pdf.

68 Van Campenhout, Geert, *Revaluing the Role of Parents as Financial Socialization Agents in Youth Financial Literacy Programs*, 49(1) Journal of Consumer Affairs 186–222 (2015).

69 Hammond, Wayne, *Principles of Strength-Based Practice,* Resiliency Initiatives (2010), *available at* ayscbc.org/Principles%20of%20Strength-2.pdf.

70 Morduch, Jonathan, Timothy Ogden, and Rachel Schneider, *An Invisible Financial Sector: How Households Use Financial Tools of Their Own Making*, U.S. Financial Diaries (2014), *available at* usfinancialdiaries.org/issue3-informal.

3.3 Recommendation three: Provide children and youth with experiential learning opportunities

3.3.1 What is experiential learning?

Experiential learning is the process of deriving meaning from direct or hands-on experiences. Experiential learning opportunities encourage children and youth to take initiative, make decisions, experience the results of their choices in a safe environment, and learn through reflection.

3.3.2 Why is experiential learning important for supporting financial capability?

Experiential learning opportunities support financial capability by allowing youth to acquire and practice financial decision-making skills and habits. Incorporating activities that build financial decision-making skills can help youth build confidence in their ability to successfully complete financial tasks in the real world.

3.3.3 Experiential learning in action

Children in all stages of development benefit when they have access to age-appropriate experiential learning opportunities because these experiences help children and youth build their financial knowledge and decision-making skills and foster their development of positive financial habits and rules of thumb. Effective experiential learning opportunities:

- Support independent decision-making by providing guidance and opportunities for reflection.
- Take advantage of teachable moments – opportunities to explain new information, values, norms, behaviors, or skills.
- Provide opportunities for repeated practice.
- Incorporate planning and goal setting.

3.3.4 Support independent decision-making by providing guidance and opportunities for reflection

When doing experiential activities, it is important that participants make independent financial decisions in a safe environment and then experience the results of their decisions. In this way, experiential activities help youth learn from their mistakes and successes. Both research and teachers' experience suggest that experiential learning is most beneficial when the content is relevant and meaningful in the lives of students.[71, 72]

Providing children and youth with firsthand experiences alone does not necessarily ensure an effective learning experience, particularly if children are doing something for the first time. Providing guidance and opportunities for reflection are key to helping youth find their own way and learn from their choices.[73, 74] Guidance and feedback while children practice financial behaviors increases the likelihood they will internalize the learning and use it to form financial habits and decision-making strategies.

How much help and feedback children need changes as they get older and gain increasing financial knowledge and skills. Teachers, parents, and other mentors can help teach positive financial behaviors using an instructional approach called scaffolding. This approach breaks down learning into small steps by reducing the frustration of learning a new skill. Scaffolding provides active guidance and modeling when needed early in the learning process. As the child masters each aspect of the new skill, the instructor gradually gives less support. This creates

---

[71] Fernandes, Daniel, John G. Lynch Jr., and Richard G. Netemeyer, *Financial Literacy, Financial Education and Downstream Financial Behaviors*, 60(8) Management Science 1861–1883 (2014).

[72] Johnson, Elizabeth, and Margaret S. Sherraden, *From Financial Literacy to Financial Capability Among Youth*, 34(3) Journal of Sociology & Social Welfare 119–145 (2007).

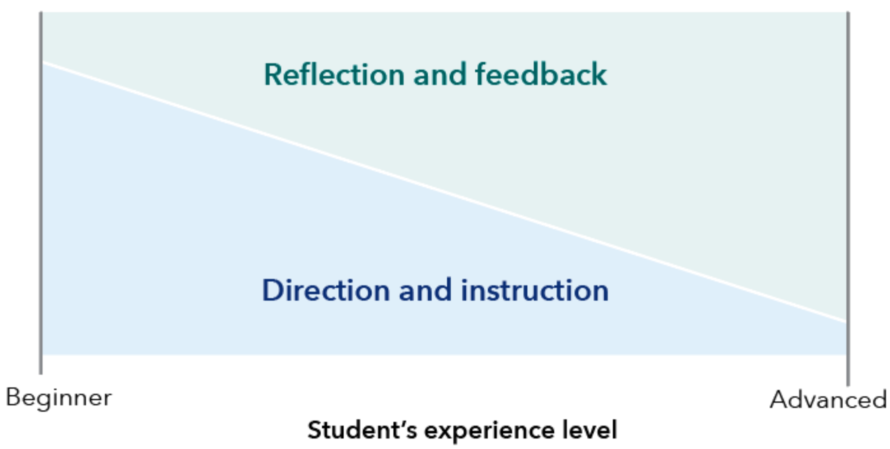
[73] Kolb, David A., *Experiential Learning: Experience as the Source of Learning and Development* (Englewood Cliffs, NJ: Prentice Hall 1984).

[74] Laney, James D., *Experiential Versus Experience-Based Learning and Instruction*, 86(4) The Journal of Educational Research 228–236 (1993).

built-in opportunities for reflection and feedback as teachers and parents allow youth to make increasingly more independent decisions.[75]

As demonstrated in Figure 1, below, a new experiential learner needs a lot of direct, upfront instruction. As the student gains experience, the teacher can focus instead on providing feedback and opportunities to reflect on decisions and actions. For example, a financial education teacher working with a student who has no experience in selecting a financial product will need to begin with direct instruction on what factors to consider and where accurate information can be found on those factors. Once the student knows what factors to consider and where to get information on options, the teacher can ask the student to make a decision. Next, the teacher can ask the student to reflect on the results of her choices and what she might do differently next time.

FIGURE 1: SCAFFOLDING EXPERIENTIAL LEARNING



[75] Bransford, John D., Ann L. Brown, and Rodney R. Cocking, Ed., How People Learn: Brain, Mind, Experience, and School (Commission on Behavioral and Social Sciences and Education, National Research Council, Washington, DC: National Academy Press 2004), *available at* nap.edu/catalog/9853/how-people-learn-brain-mind-experience-and-school-expanded-edition.

3.3.5 Take advantage of teachable moments

Research suggests that "just-in-time" financial education can be a promising method for influencing financial behavior.[76] An example of "just-in-time" teaching would be learning about student loans and debt management when a student is thinking about how to finance college. Depending on the platform and pathway of the experiential learning, the instruction could be delivered in a variety of ways, including via the classroom, an after-school or community-based program, games or simulations, or interactions with parents or other mentors.

A majority of the experiential learning programs reviewed for this report used classroom-based financial education coupled with guidance or feedback. There are promising strategies that involve more-intensive approaches, including individual coaching for students in traditional financial education classes. Intensive strategies are most appropriate for teens and young adults who are making real-world financial decisions.

Experiential learning can also occur virtually or through simulations. An emerging example of simulations is "gamification," which uses game mechanics to engage and motivate individuals toward specific actions. "Gamification" techniques leverage people's natural desires for competition with others and for achievement (e.g., scoring points) in order to engage them. Another example of a simulation is a reality fair in which high school students confront some of the financial challenges they will experience when they start life on their own. In such a program, students visit booths where they must make financial decisions such as staying within their monthly earnings, paying bills, and dealing with temptations to spend. At the end of the activity, students reflect on their financial choices and experiences with a financial counselor.[77]

These learning opportunities allow youth to make independent decisions in safe environments and to learn from those firsthand experiences. Providing guidance and opportunities for

---

[76] Fernandes, Daniel, John G. Lynch Jr., and Richard G. Netemeyer, *Financial Literacy, Financial Education and Downstream Financial Behaviors*, 60(8) Management Science 1861–1883 (2014).

[77] *Reality Fairs,* The National Credit Union Foundation*, available at* ncuf.coop/how-we-help/real-solutions/experiential/reality-fairs.cmsx.

decision-making practice and reflection may help youth better learn and retain financial knowledge and skills. Schools that opt to offer experiential learning activities can play an important role in teaching youth decision-making skills.

3.3.6 Provide opportunities for repeated practice

To make experiential learning opportunities blossom into habits and well-informed rules of thumb, students need repeated opportunities for practice. The first time engaging in a behavior or making decisions involving new content requires planning and intentional thought. However, with practice and repeated experience engaging in similar financial behaviors, children and youth gradually adopt and automate those behaviors.[78, 79, 80]

Repeated and ongoing experiential learning can also result in a greater sense of self-confidence and self-efficacy in managing resources. Young adults are more likely to act on what they believe they know (self-confidence) and what they believe they can accomplish easily (self-efficacy) than on their actual financial literacy.[81]

3.3.7 Incorporate planning and goal setting

Allowing children and youth to manage resources in pursuit of a goal they set – whether or not it is financial in nature – is an important component of experiential learning. When children drive experiential learning activities, the lessons are more likely to be culturally and socially relevant

---

[78] Lally, Phillippa, Cornelia H. M. van Jaarsveld, Henry W. W. Potts, and Jane Wardle, *How are habits formed: Modelling habit formation in the real world*, 40 European Journal of Social Psychology 998–1009 (2010).

79 Verplanken, Bas, *Beyond frequency: Habit as mental construct*, 45(3) British Journal of Social Psychology 639–656 (2006).

[80] Wood, Wendy, and David T. Neal, *A New Look at Habits and the Habit-Goal Interface*, 114(4) Psychological Review 843–863 (2007).

[81] Serido, Joyce, Soyeon Shim, and Chuanyi Tang, *A developmental model of financial capability: A framework for promoting a successful transition to adulthood*, 37(4) International Journal of Behavioral Development 287—297 (2013).

to the individual. Practice setting short- and long-term goals not only develops positive financial habits but also enhances existing executive function by promoting future orientation.

Practice can strengthen goal setting, planning, and follow-through skills. Goal setting, and creating plans and timelines to achieve goals, can be incorporated into many types of experiences.

The home environment is another platform in which experiential learning can be promoted. Organizations serving parents and caregivers who are not confident in their own financial abilities can use experiential learning activities focused on, for example, goal setting rather than more traditional money management topics. By allowing parents to decide which goals they would like to discuss and work on with their children, programs may be able to encourage further experiential learning opportunities.

3.3.8 Experiential learning examples from the field for children in middle childhood (ages 6–12)

Financial socialization of younger children happens primarily through interactions with parents and caregivers, which makes activities at home a natural platform for experiential learning. Getting an allowance, for example, gives children opportunities to practice day-to-day money management and financial decision-making strategies. Giving an allowance creates opportunities for parents to provide financial advice and encourage children to reflect on their choices. Research shows that receiving an allowance, combined with parental oversight and talks about budgeting and saving, has a greater impact on adult savings behaviors than just getting an allowance.[82]

School- and community-based programs are also important platforms for providing meaningful experiential learning opportunities. This is particularly true for economically vulnerable or

---

82 Bucciol, Alessandro, and Marcella Veronesi, *Teaching children to save: What is the best strategy for lifetime savings?* 45(C) Journal of Economic Psychology 1—17 (2014).

disadvantaged children and youth. At younger ages, financial simulations that reward children for managing tangible resources in the classroom are promising strategies for experiential learning in a protected, supervised environment.

Bank-in-school programs can provide ongoing opportunities to practice making financial decisions, particularly if they incorporate guidance and encourage children to reflect on their experiences. To incorporate experiential learning, schools can partner with a bank or credit union to provide a branch inside the school. This allows students who are “customers” to establish short- or long-term savings goals, develop plans to achieve those goals, and reflect on how well they are staying on track with their goals.

Entrepreneurship programs, which give youth opportunities to create business plans, set sales goals, track their sales, and, in the process, earn and manage money, are another platform for experiential learning.

3.3.9 Experiential learning examples from the field for teens and young adults (ages 13–21)

When teens start jobs or internships, they are exposed to new platforms where they may acquire new financial experiences. A number of promising program models connect teens and young adults to employment opportunities. These programs help them earn and manage money, connect them to financial institutions, and offer financial lessons. When coupled with mentoring services or academic support, these programs provide a platform and pathway for teens and young adults to acquire effective financial habits and norms and experiential lessons.

Emerging strategies combine the delivery of financial knowledge with the development of positive personal financial habits. Some of these programs use smartphone apps to spur positive financial behaviors by setting challenges and tracking progress.

3.4 Recommendation four: Teach youth financial research skills

3.4.1 What are financial research skills?

Most major financial decisions that adults make (e.g., higher education financing, homeownership, retirement planning) require them to gather financial information through research, use the information to consider trade-offs, and act on that information in a way that serves their life goals.

Helping youth to build financial research skills means:

- Equipping youth with the knowledge and skills they need to find and evaluate relevant financial information.
- Helping youth develop mental "guideposts" that prompt them to recognize situations in which they should seek out additional information.

3.4.2 Why are financial research skills important for supporting financial capability?

The ability to do financial research makes youth more flexible and adaptable consumers who are able to navigate changing financial markets and situations over their life course. Building financial research skills goes hand in hand with the notion that financial education in adolescence and young adulthood should focus on providing "just-in-time" information. Teens would likely find a lesson on comparing cellphone costs more relevant than one on comparing mortgage costs. Yet, the financial research skills involved in comparison shopping cellphone plan costs, including financial research and analysis, can easily transfer to decisions they may make later in life, including shopping for a car loan or mortgage.

Furthermore, research suggests that knowledge of how to do purposeful financial research and analysis of options, coupled with the knowledge of how to execute financial decisions, may be the type of knowledge most likely to support financial well-being.[83]

3.4.3 Financial research skills in action

Teaching financial research skills should begin in middle childhood and continue into adolescence and young adulthood. Promising strategies for teaching financial research skills foster critical thinking and provide opportunities for practice, which in turn help youth develop mental "guideposts" that support sound decision-making practices.

The ability to make sound financial decisions relies on two distinct elements:

1. The critical-thinking skills fueled by executive function, which allow one to perform research and analysis.
2. Knowledge of factual information relevant to the decision.

One strategy to help youth build these mental "guideposts" for financial decision-making is using case studies to illustrate common situations or decisions, especially ones that would lead many people to make mistakes. For example, a case study might teach youth that it is important to check their budget and comparison shop before purchasing an expensive item. In this case, expensive items serve as the mental "guidepost" to trigger youth to do more research and consult their own budget. Most people are unable to constantly monitor their own behavior but instead rely on cognitive heuristics[84] (also known as decision-making shortcuts, or rules of thumb) to recognize situations in which they are likely to make a mistake.[85]

It can be easier to recognize other people's mistakes than our own, especially if we lack a

---

[83] *Financial well-being: The goal of financial education*, Consumer Financial Protection Bureau (2015), *available at* consumerfinance.gov/reports/financial-well-being/.

[84] *Cognitive heuristics* are mental shortcuts we use to quickly make decisions or resolve challenges when we have limited information.

[85] Kahneman, Daniel, *Thinking, Fast and Slow* (New York: Farrar, Strauss, Giroux 2013).

foundation of experience to draw upon. Thus, case studies can be especially useful, as they prompt youth to recognize when they are likely to need more help.

Another strategy to build financial research skills is to provide youth with opportunities to conduct financial research. Exercises that guide them through the step-by-step process of seeking information, determining its validity, and weighing the available options to see which best fits their needs can help produce savvy, confident consumers.

Exercises might include helping youth research and comparison shop the options available when they pay for college, buy a car, rent an apartment, or choose a cellphone plan. Youth will need assistance, coaching, and advice as to which options best fit their needs. These types of exercises enhance young people's critical-thinking skills and build a foundation of experiences they can draw upon for future decisions. Schools are an excellent platform for delivering this practice. Financial scenarios offer opportunities to deliver hands-on experience applying math concepts to real life, such as comparison shopping interest rates.

It can also be valuable to look for ways to combine pathways, for example, by building financial research skills lessons into experiential learning activities. Youth who learn to apply skills in a variety of situations may find it easier to transfer skills from a situation in an experiential learning activity to a future financial situation. Connecting activities can also increase the relevance of research exercises. For example, in a goal-setting activity, organizations can easily insert research exercises into the step where the teen creates a plan to achieve the goal.

4. Conclusion

Understanding how consumers navigate their financial lives is essential to helping people grow their financial capability over the life cycle. The financial capability developmental model described in this report provides new evidence-based insights and promising strategies for those who are seeking to create and deliver financial education policies and programs.

This research reaffirms that financial capability is not defined solely by one's command of financial facts but by a broader set of developmental building blocks acquired and honed over time as youth gain experience and encounter new environments. This developmental model points to the importance of policy initiatives and programs that support executive functioning, healthy financial habits and norms, familiarity and comfort with financial facts and concepts, and strong financial research and decision-making skills.

The recommendations provided are intended to suggest actions for a range of entities, including financial education program developers, schools, parents, and policy and community leaders, toward a set of common strategies so that no one practitioner needs to tackle them all.

The CFPB is deeply committed to a vision of an America where everyone has the opportunity to build financial capability. This starts by recognizing that our programs and policies must provide opportunities that help youth acquire all of the building blocks of financial capability: executive function, financial habits and norms, and financial knowledge and decision-making skills.

The CFPB is also committed to engaging with others who are working in this arena to ensure that all children and youth have access to evidence-based, age-appropriate, and developmentally appropriate financial education. We are starting by leveraging these research findings to inform the financial education tools and resources that we provide to parents and educators. Some examples of this include "Money as you grow" and "Personal finance teaching pedagogy."[86, 87] The CFPB is committed to promoting these findings to a variety of policy and community leaders working to advance financial education in states and nationally. For more information on the CFPB's financial capability resources for youth, please visit us at consumerfinance.gov/youth-financial-education.

[86] *Money as you grow,* Consumer Financial Protection Bureau (2016)*, available at* consumerfinance.gov/money-as-you-grow.

[87] *CFPB personal finance teaching pedagogy*, Consumer Financial Protection Bureau (2016)*, available at* http://files.consumerfinance.gov/f/documents/092016_cfpb_YouthFinEdPedagogy.pdf.

APPENDIX A:

Youth capability milestones summary

The following table summarizes capability milestones at different developmental stages for the three financial capability building blocks:

1. Executive function.
2. Financial habits and norms.
3. Financial knowledge and decision-making skills.

It also shows the adult financial behaviors and characteristics related to financial well-being that are supported by each of the three building blocks of financial capability.

This is not a description of what is necessarily typical for all children in these age ranges. Rather, it provides information on the abilities and attributes that a young person would have in a best-case scenario, as a way to conceptualize the potential outcome goals of youth financial education programming.

TABLE 9: SUMMARY OF YOUTH CAPABILITY MILESTONES AND THEIR RELATIONSHIP TO ADULT OUTCOMES

	Executive function	Financial habits and norms	Financial knowledge and decision-making skills
Early childhood (ages 3–5)	▪ Begins to demonstrate self-regulation, persistence, and focus ▪ Can use these qualities when using and managing limited resources like time, money, treats, or belongings	▪ Has begun to develop basic values and attitudes around keeping (saving) and using (consuming) resources	▪ Has early numeracy skills like counting and sorting ▪ Grasps very basic financial concepts like money and trading
Middle childhood (ages 6–12)	▪ Shows the ability to plan ahead and delay gratification ▪ Shows future orientation	▪ Has begun to develop a positive attitude toward planning, saving, frugality, and self-control ▪ Has begun to show positive financial habits, like planning and saving ▪ Can make spending and saving decisions aligned with his or her goals and values ▪ Is self-confident about completing age-appropriate financial tasks	▪ Understands core basic financial concepts and processes ▪ Has successfully managed money or other resources to reach his or her own goals

	Executive function	Financial habits and norms	Financial knowledge and decision-making skills
Adolescence and young adulthood (ages 13–21)	▪ Demonstrates critical-thinking skills ▪ Demonstrates future orientation ▪ Demonstrates the ability to plan ahead and delay gratification	▪ Has a positive attitude toward planning, saving, frugality, and self-control ▪ Shows positive money management habits and decision-making strategies ▪ Can make spending and saving decisions aligned with his or her goals and values ▪ Is self-confident about completing age-appropriate financial tasks	▪ Grasps advanced financial processes and concepts ▪ Can successfully manage money or other resources to reach his or her own goals ▪ Can identify trusted sources of financial information and accurately process that information
Adult capabilities	▪ Sets goals and makes concrete plans to meet them ▪ Can control impulses and think creatively to address unexpected challenges ▪ Completes tasks set for oneself, perseveres in the face of obstacles	▪ Makes financial decisions in light of his or her own standards rather than in comparison to other people (i.e., has internal frame of reference) ▪ Believes in his or her own ability to manage money and achieve financial goals (i.e., has financial self-efficacy) ▪ Has effective routine money management habits	▪ Knows when to seek out, and where to find, reliable information to make a financial decision ▪ Knows how to process financial information to make sound financial decisions ▪ Knows how to execute financial decisions, including monitoring and adapting as necessary to stay on track ▪ Follows through on financial decisions

APPENDIX B:

Understanding Financial Well-Being

The CFPB's prior research into adult financial well-being produced hypotheses about the personal factors – certain knowledge, behavior, and personal traits – that would help people achieve greater financial well-being as adults.[88] Factors beyond an individual's control, such as structural opportunities, macroeconomic context, and family resources, of course play a significant role in financial outcomes and serve as critical enablers of an individual's ability to use the financial skills they have developed. However, our research has focused on the areas where financial education efforts can most help to empower consumers – on the knowledge, skills, attitudes, and behaviors that may be influenced by financial education and other decision-making supports.

In addition to socioeconomic factors and opportunities, these personal drivers of adult financial well-being include deliberate behaviors such as engaging in financial research, setting financial goals and making concrete plans to meet them, and following through on financial decisions, all of which require the factual knowledge and financial skills or know-how to do well. Effective, routine money management is another behavioral driver of financial well-being in adulthood. Unlike the analytical and planning skills needed for deliberate financial decision-making, effective navigation of day-to-day financial life requires healthy money habits, norms, and rules of thumb. Adults with higher levels of financial well-being also seem to have some notable

[88] See *Financial well-being: The goal of financial education*, Consumer Financial Protection Bureau (2015), *available at* consumerfinance.gov/reports/financial-well-being/, for a full description of research methods and findings related to adult drivers of financial well-being.

personal traits and attitudes. These include impulse control and the ability to delay gratification in service of future rewards, perseverance in the face of obstacles, belief in their ability to manage money and achieve financial goals (financial self-efficacy), and a tendency to make financial decisions in light of their own standards rather than in comparison to other people (internal frame of reference).

Table 10, below, lists the hypothesized personal drivers of adult financial well-being that were included in the CFPB's research.

TABLE 10: HYPOTHESIZED PERSONAL DRIVERS OF ADULT FINANCIAL WELL-BEING

Financial behaviors
Effective routine money management, which encompasses often unconscious habits, intuitions, and decision-making shortcuts (heuristics)
Financial research and knowledge seeking, which support purposeful, informed financial decision-making
Financial planning and goal setting, which give purpose and structure to individual financial decisions
Following through on financial decisions, the final step between intentions and desired outcomes
Financial ability
Knowing when and how to find reliable information to make a financial decision
Knowing how to process financial information to make sound financial decisions
Knowing how to execute financial decisions, adapting as necessary to stay on track
Personal traits
Comparing yourself to your own standards, not to others (internal frame of reference)
Being highly motived to stay on track in the face of obstacles (perseverance)
Having a tendency to plan for the future, control impulses, and think creatively to address unexpected challenges (executive functioning)
Believing in your ability to influence your financial outcomes (financial self-efficacy)

Source: Financial well-being: The goal of financial education, Consumer Financial Protection Bureau (2015), available at consumerfinance.gov/reports/financial-well-being/.

APPENDIX C:

Methodology

There are two separate but related streams of research underpinning the findings outlined in this report. The first stream explored the developmental origins of financial capability and resulted in the creation of a financial capability developmental model. The second stream developed a set of recommendations for applying the developmental model in youth programs.

The research team that conducted both streams of research was led by the Corporation for Enterprise Development, under contract to the CFPB. The team included academic experts in financial capability, as well as educational and developmental psychology, from the University of Wisconsin–Madison and the University of Maryland, Baltimore County, as well as ICF International.

Creating the developmental model of financial capability

The research process to identify the developmental origins of financial capability took as its starting point the findings of the CFPB's prior research into personal factors that seem to support adult financial well-being. These adult abilities, attributes, and behaviors (summarized in Appendix B) formed the basis of the adult financial capability construct to which this research sought to uncover the developmental origins. The methodology to create the developmental model then consisted of three stages of investigation:

- Analysis of the coded interview transcripts from the CFPB's previous adult financial well-being research to understand experiences in youth that contribute to financial identities and values.
- Extensive review of published research.
- Consultation with national experts representing perspectives from a variety of disciplines.

In the first stage of this research stream, the research team analyzed approximately 1,600 pages of consumer and practitioner interview transcripts from the CFPB's previous research on adult financial well-being.[89] The analysis investigated themes and trends indicating experiences in youth that contributed to individuals' financial identities and values.

In stage two, the researchers investigated what is known, and what is not yet understood, in published academic research about how and when children and youth acquire and develop financial capability, with a particular focus on the fields of consumer science, developmental psychology, and education. The researchers focused specifically on the personal drivers of financial well-being that may be influenced by financial education and other decision-making supports, while remaining aware that factors beyond an individual's control can play a significant role in financial outcomes. The researchers also sought to gain insight into moments during youth development when learning events and activities are likely to have the greatest impact.[90]

Finally, in stage three, the research team consulted with 18 academic experts in child and adolescent development, education, financial capability, and consumer sciences to gain additional insights not yet reflected in published literature.

Based on these three stages of investigation, the research team developed a set of hypotheses about the attributes and abilities that develop throughout childhood and youth that serve as precursors to the behaviors, knowledge, skills, and personal traits that our prior research suggests drive financial well-being in adulthood. We refer to this collection of attributes and abilities, as well as insight into when and how they develop, as the financial capability developmental model.

---

89 Details on these interviews are available in *Financial well-being: The goal of financial education*, Consumer Financial Protection Bureau (2015), *available at* consumerfinance.gov/reports/financial-well-being/.

90 To read the full review of research, see Drever, Anita I., Elizabeth Odders-White, Charles W. Kalish, Nicole M. Else-Quest, Emily M. Hoagland, and Emory N. Nelms, *Foundations of Financial Well-Being: Insights into the Role of Executive Function, Financial Socialization, and Experience-Based Learning in Childhood and Youth*, 49 (1) (Spring 2015) Journal of Consumer Affairs 13–38, *available at* http://onlinelibrary.wiley.com/doi/10.1111/joca.12068/full.

Developing the recommendations for applying the developmental model

Following the creation of the developmental model, the CFPB and the research team created a set of recommendations that apply the model to strategies to support children and youth. These recommendations were created by first documenting trends in existing strategies and programs and then conducting a gap analysis of existing practices in light of the developmental model. This approach uncovered existing practices that seem promising, as well as opportunities to fill gaps in the types of programming currently available to support youth in the development of key building blocks of financial capability.

First, the research team conducted a field scan of over 200 existing programs and practices in the fields of youth financial education and youth development. The objective of the field scan was to document and analyze trends in existing strategies and programs. Second, the team consulted with approximately two dozen experts in youth financial education and related fields through interviews and a convening. The expert interviews were designed to better understand how existing strategies may impact youth, as well as potential modification and changes that are inspired by the developmental model.

These activities shed light on a highly diverse field of programs and strategies, spanning from two-generation programs working with young children to municipal government summer employment programs working with high school students. As a final step, the team conducted a gap analysis of existing practices in light of the developmental model to pinpoint any key elements of the model that did not appear to be present in current programs and practices.

The financial capability developmental model, itself informed by extensive literature review and expert consultation, as well as the subsequent research on existing and potential practices, provides the foundation for the recommendations for promising strategies to help children and youth acquire the building blocks of financial capability at key developmental stages.

APPENDIX D:

Definition of key terms

DEFINED TERM	DEFINITION
COGNITIVE FLEXIBILITY	*Cognitive flexibility* is the ability to think of different ways to solve a problem. It is a component of executive function that allows us to think creatively to address unexpected challenges.
COGNITIVE HEURISTICS	*Cognitive heuristics* are mental shortcuts we use to quickly make decisions or resolve challenges when we have limited information.
DECISION SHORTCUTS	*Decision shortcuts* are routine responses we use to quickly make decisions or resolve challenges when we have limited information. Synonym for cognitive heuristics (see c*ognitive heuristics* endnote below).
DELAYED GRATIFICATION	*Delayed gratification* is the willingness to forgo or postpone an immediate reward or benefit in favor of a future benefit. Along with a future orientation and impulse control, it supports self-regulation.
EXPERIENTIAL LEARNING	*Experiential learning* is the process of deriving meaning from direct or hands-on experiences. Experiential learning opportunities encourage children and youth to take initiative, make decisions, experience the results of their choices, and learn through reflection.

FINANCIAL SELF-EFFICACY	*Financial self-efficacy* is confidence in one's ability to manage finances and achieve financial goals without being overwhelmed, such as sticking to a spending plan.
FINANCIAL SOCIALIZATION	*Financial socialization* occurs when youth pick up financial attitudes, habits, and norms from observing financial behaviors of parents, peers, educators, media, or other influencers.
FUTURE ORIENTATION	*Future orientation* is having a long-term outlook and believing that there will be opportunities for you in the years ahead.
PATHWAYS	*Pathways* are the processes and experiences through which youth gain and develop the building blocks of financial capability. Major pathways include early experiences and environment, parental influence, financial socialization, experiential learning, and direct instruction.
PLATFORMS	*Platforms* are the locations or settings where youth engage in activities to develop and reinforce financial capability attributes and abilities. Major platforms include home, schools, and programs run by community organizations.
PERSEVERANCE	*Perseverance* is the willingness to continue doing something that is difficult or that you failed at before.
RULES OF THUMB	*Rules of thumb* are automatic, "go-to" responses we have to particular environmental cues that simplify the decision-making process and yield a reliably "good enough" solution. Also called cognitive heuristics, rules of thumb are mental shortcuts we use to quickly make decisions or resolve challenges when we have limited information (see *cognitive heuristics* endnote below).

SELF-REGULATION	*Self-regulation*, in the context of financial capability, is the ability to understand and control your impulses, behavior, feelings, and thoughts in financial situations, and to respond wisely when facing financial challenges, for example, by persevering, or by delaying gratification (see *cognitive heuristics* endnote below).
STRENGTH-BASED APPROACH	*A strength-based approach* to financial education focuses on having parents first share the financial habits and norms they already possess, which can build parents' confidence in their own ability to role model healthy financial habits and norms. It focuses first on what parents already know and what is important to them, and suggests actions that are easy for them to complete before moving on to new financial concepts.
WORKING MEMORY	*Working memory* is the ability to hold onto and process several pieces of information at once. In the context of building blocks of financial capability, it's used in executive function when we briefly store and recall information to compare options and make decisions.