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**Recommended Citation**

Byram, J., Grable, J., White, K. J., Thomas, M., & Watkins, K. (2021). Improving Youth Financial Literacy: A Profile of Middle School Camp Attendees. *The Journal of Extension, 59*(4), Article 2. [https://doi.org/10.34068/joe.59.04.02](https://doi.org/10.34068/joe.59.04.02)

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Improving Youth Financial Literacy: A Profile of Middle School Camp Attendees

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Abstract. The purpose of this paper is to present a profile of middle-school-age youth who participated in a week-long experiential residential camp focused on helping campers learn about and interact with money, personal finance topics, and mainstream financial service providers. Based on pre- and post-test data, it was determined an experiential real-world camp experience can increase the financial confidence and goal-setting abilities of young people.

INTRODUCTION

As noted by Johnson and Sherraden (2007), youth in the United States face many challenges associated with growing up in a complex and fast-moving financial environment. Rising debt levels, stagnant wages, wealth inequality, and low savings rates can serve as barriers to accessing and utilizing household financial management resources. These same forces can place young people in danger of being taken advantage of through marketplace asymmetry and sophisticated marketing tactics (LeBaron et al., 2020; Lusardi, 2019). Much of the research that has been conducted to better understand how well young people are positioned to access mainstream financial services has shown that financial illiteracy is widespread among young people. This is a particularly pressing issue among youth who are living in low socio-economic households (Lusardi et al., 2010).

This paper adds to the discussion about youth financial education and the broader financial literacy literature by (a) presenting the profile of middle-school age youth who participated in a week-long experiential residential camp (i.e., MONEY DAWGS) and (b) describing the outcomes associated with camp participation. The MONEY DAWGS camp was developed to help young people learn about and interact with money, personal finance topics, and mainstream financial service providers. Using data obtained from campers over a multi-year period, it was determined that a middle-school level financial literacy camp like MONEY DAWGS can increase camper financial confidence and goal setting skills. Extension professionals are encouraged to adopt or adapt elements of the camp experience in their work with youth who are interested in increasing their financial literacy and financial capabilities.

THE MONEY DAWGS CAMP

The notion of developing curricula and camps to help young people gain access to household and personal finance, economics, and financial management resources in the hope of increasing financial literacy and capabilities has been applied in different contexts over the past quarter century (CFPB, 2019; Danes et al., 1999; Garcia et al., 2017; McKenna & Carroll, 1999; McCormick, 2008; Next Gen Personal Finance, 2017; Smith et al., 2008). Financial education camps and programs have been shown to improve financial knowledge and attitudes about money among young people (Amagir et al., 2018). Much of the evidence showing a positive educational impact has been based on data from high-school age youth. Even so, comprehensive strategies focused on educating youth have yet to be widely adopted (McCormick, 2009).

Educators and researchers working at the University of Georgia were interested in determining whether youth financial education could be successfully expanded to include middle-school age children. To this end, they developed a residential youth financial literacy camp presented over several summers on the University of Georgia campus. IRB approval was obtained. The camp was designed so that nearly all camp attendees lived in dorms during the camp week, joining other campers from different educational programs occurring during the same week. When not participating
in the financial education portion of the camp, campers were under the supervision of camp counselors who were not directly affiliated with the MONEY DAWGS program. Enrollment was limited to 20 students each year. The purpose of the camp was to introduce middle-school age youth to household financial management and personal finance topics and concepts, with a special emphasis on helping young people improve skills related to (a) interacting with money physically and psychologically, (b) communicating openly about money, (c) practicing financial management skills, and (d) establishing an awareness of mainstream financial services providers (e.g., opening checking and savings accounts, investing, credit reports and scoring, etc.). The camp was designed to combine learning outcomes typically included in introductory financial education course work with hands-on student-instructor interactions, field trips, and activities that provide applied lessons related to improving financial capabilities. Camp organizers emphasized the importance of making financial management skills and processes relevant and applicable to the daily lives of young people while conceptualizing money and household financial management topics as something fun and beneficial rather than a burden or an insurmountable challenge. Table 1 illustrates the broad scope of activities included in the camp program.

Both graduate and undergraduate college students managed the day-to-day workings and instruction of the camp under the direction of university faculty members who were part of a university financial planning educational unit. Student counselors were chosen based on their interest in teaching personal finance topics to youth. Overall, faculty members observed that counselors exhibited a high degree of passion for teaching. One student was identified as the lead counselor and worked in tandem with two assistant counselors, one of which was identified as the following year’s lead counselor. Each counseling team was trained to ensure that daily camp activities were biased towards experiential learning and hands-on work, as recommended by Mandell (2001).

The following discussion provides a summary of the type of individuals who attended the camps and the outcomes associated with camp participation.

**CAMP PARTICIPANTS**

Of the 60 camp attendees, 34 were male. The range of ages from 2017 through 2019 spanned from 10 to 15 years of age, with the modal age category being 10 to 12 years of age. Ethnic and racial diversity was noted among the camp attendees. Forty-nine percent (49%) of respondents identified as White, 11% identified as Asian, 13% identified as Black, and 27% self-reported as multiracial. As shown in Table 2, those who attended the camp came with a variety of experiences. More than one-third of camp attendees reported taking a previous personal finance course, with 41% stating that their financial knowledge was high, 38% saying their knowledge was low, and 21% indicating indifference. Similarly, about one-third

| Table 1. MONEY DAWGS Camp Schedule |
|-----------------------------------|
| **Day 1** | **Day 2** | **Day 3** | **Day 4** | **Day 5** |
| 8:30 | Welcome / Overview | Topic(s) of the Day: Savings / Communication | Topic of the Day: Spending Plans | Topic of the Day: Investing / Future Self | Topic(s) of the Day: Giving to Others and Money Dawgs Bowl |
| 10:30 | Team Building Activities / Money Attitudes / Habits | Team Building Activities / Savings | Team Building Activities / Spending Plans / Goal Setting | Team Building Activities / Investments | Team Building Activity / Giving Challenge |
| Noon | Lunch Credit Union Visit | Lunch Team Building Activities / Savings | Lunch Spending Plan / Buying: Snack Time at Store | Lunch / Movie (e.g., Richie Rich, Confessions of a Shopaholic) | Lunch Money Dawgs Bowl Extravaganza |
| 3:00 | Reflection | Reflection | Reflection | Reflection | Reflection |
| 3:30 | End | End | End | End | End |
## Table 2. Descriptive Data of Camp Attendees Based on Pre-Test Assessments (n = 60)

| Camp Attendee Characteristic                          | Frequency |
|-------------------------------------------------------|-----------|
| **Gender**                                            |           |
| Female                                                | 43%       |
| Male                                                  | 57%       |
| **Ethnicity+**                                         |           |
| White                                                 | 49%       |
| Multiracial                                           | 27%       |
| Black                                                  | 13%       |
| Asian                                                  | 11%       |
| **Age**                                               |           |
| 10 to 12 Years                                        | 53%       |
| 13 to 15 Years                                        | 47%       |
| **Previous Course in Personal Finance in School**     |           |
| No                                                     | 32%       |
| Yes                                                    | 38%       |
| Don't Remember                                         | 30%       |
| **Who Is Most Knowledgable About Money in Household?** |           |
| Camp Attendee                                         | 2%        |
| Mother                                                 | 36%       |
| Father                                                 | 28%       |
| Don't Know                                             | 25%       |
| Prefer Not to Say                                      | 9%        |
| **How Close Does Camp Attendee Feel to Parent(s)**    |           |
| Not Very Close                                         | 2%        |
| Fairly Close                                           | 17%       |
| Quite Close                                            | 36%       |
| Extremely Close                                        | 45%       |
| **Do You Have at Least One Savings Goal?**             |           |
| Yes                                                    | 59%       |
| No                                                     | 41%       |
| **Asset Ownership (multiple responses permitted)**     |           |
| Checking Account                                       | 34%       |
| Savings Account                                        | 68%       |
| Investments                                            | 23%       |
| **If Saving, Why? (multiple responses permitted)**     |           |
| Education                                              | 76%       |
| Rainy Day                                              | 19%       |
| Specific Savings Goal                                  | 50%       |
| Charity                                                | 8%        |
| Other Categories                                       | 40%       |
| **Receive an Allowance**                               |           |
| No                                                     | 28%       |
| Yes                                                    | 30%       |
| Sometimes                                              | 42%       |
Table 2. (continued)

| Camp Attendee Characteristic          | Frequency |
|---------------------------------------|-----------|
| How Allowance is Allocated            |           |
| For Savings                           | 38%       |
| For Spending                          | 26%       |
| For Giving                            | 8%        |
| For Goals                             | 8%        |
| Other                                 | 20%       |
| Perception of Family Financial Situation |            |
| Very Bad                              | 0%        |
| Bad                                   | 2%        |
| Neither Good nor Bad                   | 19%       |
| Good                                  | 45%       |
| Very Good                             | 34%       |
| Confidence in Achieving Financial Goals |             |
| Not at All Confident                  | 8%        |
| Somewhat Confident                    | 72%       |
| Very Confident                        | 20%       |
| Anxious About Finances                |           |
| Strongly Disagree                     | 9%        |
| Disagree                              | 21%       |
| Neither Agree nor Disagree            | 55%       |
| Agree                                 | 15%       |
| Strongly Agree                        | 0%        |
| Self-Assessed Financial Knowledge     |           |
| Very Low                              | 2%        |
| Low                                   | 6%        |
| Somewhat Low                          | 30%       |
| Neither High nor Low                  | 21%       |
| Somewhat High                         | 36%       |
| High                                  | 5%        |
| Very High                             | 0%        |

of camp attendees felt that in their household their mother was the most knowledgeable about money. An important caveat when interpreting this figure is to note that over 80% of camp attendees reported being quite or extremely close to their parents. Additionally, nearly 80% of camp attendees indicated that their family’s financial situation was either good or very good. No camp attendee reported living in a household with a very bad financial situation.

Nearly three-quarters of camp attendees reported receiving some type of monetary allowance from their parents. Among those that did receive an allowance, 59% reported having at least one savings goal. The primary savings goal was funding future college costs. Slightly more than two-thirds of camp attendees reported having a savings account, with 34% also noting ownership of a checking account. Less than 25% of camp attendees reported owning investments.

MEASURES OF CAMP OUTCOMES
Campers (n = 60, with 100% response rate) were asked to complete a pre- and post-test that included questions about financial confidence, goal setting, and objective financial knowledge. Financial confidence was assessed by asking camp attendees to indicate how confident they were in achieving at least one financial goal. Three answer choices were provided: (1) not at all confident, (2) somewhat con-
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fident, and (3) very confident. The modal response category (at the pre- and post-test) was somewhat confident.

Goal setting was evaluated by having camp attendees indicate whether they had at least one savings goal. Nearly 60% of campers came to the camp with at least one savings goal. At the end of the week-long camp, the percentage had increased, on average, to 75%.

Objective financial knowledge was measured with the following eight items:

1. Credit scores affect interest rates.
   a. True
   b. False
2. Money saved today is worth more tomorrow.
   a. True
   b. False
3. Which is better, simple interest or compound interest?
   a. Simple Interest
   b. Compound Interest
4. Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account?
   a. More than today
   b. Exactly the same
   c. Less than today
5. Buying a single company’s stock usually provides a safer return than a stock mutual fund.
   a. True
   b. False
6. What is the most important component of the credit scoring process?
   a. Payment History
   b. Credit Utilization
   c. Age of Credit
   d. Credit Type
   e. New Credit
7. A surplus is when you have more expenses than income.
   a. True
   b. False
8. Generally, what is the recommended amount of your income to save?
   a. 0%
   b. 10%
   c. 15%
   d. 20%

The number of correct answers was recorded for each camp attendee. The mean percentage correct on the pre-test (i.e., the test given on the first day of camp) was 50%. The same questions were asked at the conclusion of the camp. The mean percentage of correct answers at the end of the camp remained at 50%; however, the standard deviation of scores dropped from 19.27 to 13.74 from pre-to post-test.

CAMP OUTCOMES
As summarized in Table 2, those who attended the MONEY DAWGS camp came to the activity with an interest in or some experience with money-related concepts, tools, and behaviors. Nonetheless, the camp experience showed overall effectiveness in positively shifting camp attendee confidence and goal-setting behavior. Based on Wilcoxon Signed Ranks tests, it was noted that confidence ($Z = -5.581, p < .01$) and goal-setting behavior ($Z = -2.000, p < .05$) exhibited a positive change, whereas no change was noted in relation to objective financial knowledge ($Z = -0.216, p = .83$). Confidence levels shifted significantly, as did the establishment of at least one financial goal. It is possible that each camp attendee's previous experience and access to financial education through course work, family discussions, or self-study impacted knowledge outcomes. As such, it is reasonable to conclude that the most meaningful outcomes associated with a financial-management-focused camp, among those with preexisting knowledge, may revolve around improving confidence and behavioral outcomes rather than boosting objective financial knowledge.

DISCUSSION AND IMPLICATIONS
Financial literacy camps like MONEY DAWGS appear to facilitate the acquisition of financial capabilities among middle-school age youth. An environment focused on experiential activities that are designed to engage students in real-world scenarios in which to learn and practice financial management skills appears to help young people connect information and data to real life situations. However, it is important to note that there may also be negative outcomes associated with teaching financial management concepts in a group setting. As noted in this paper, financial confidence increased across the camp attendees. This can be viewed positively and negatively. When viewed positively, an increased
sense of confidence can help young people exhibit greater self-assurance when making saving, spending, and investing decisions. Confidence may also encourage proactive financial management behaviors that facilitate lifelong learning and an openness to engaging with financial systems. When viewed negatively, too much confidence may result in an over-confidence bias. When over-confident, a young person may not fully account for the risks associated with a financial decision.

Insights from the camp experience have direct implications for Extension professionals. The camp schedule shown in Table 1 can easily be replicated as a residential, day, or online program. The schedule can also be split into weekly elements. The key feature that appears to lead to camper achievement is building a counseling team that has a passion for financial literacy education (Serin, 2017). Additionally, it is very important that the counselors provide stimulus and encouragement that are age appropriate. For example, when working with middle-school age youth, it is essential to take breaks outside the classroom and to incorporate kinesthetic activities in addition to cognitive work (Knight, 2016). As nearly all Extension professionals know, financial literacy education provided in an engaging and stimulating way offers the best pathway to outcome achievement.

As noted above, Extension professionals who are interested in replicating the MONEY DAWGS approach should focus efforts on ensuring that camp attendees have daily opportunities to practice the skills they are learning. One popular activity featured in the MONEY DAWGS curriculum is a shopping trip. In this activity, camp attendees are divided into teams and asked to create a budget for “team snacks.” Camp attendees are told that snacks need to include a “healthy” option. Camp attendees are then given $15 per team to buy items that fit within their budget. After spending time in a grocery store, teams purchase the items and come together to share experiences and food choices with the entire group. The entertaining element associated with this activity is sharing food and competing to hear which team ended the experience under budget. Another activity that campers find enjoyable is a field trip to a credit union to learn about checking and savings accounts and how to save for college. A final day quiz bowl can also be used to encourage retention of knowledge and applied skills.

The direct application of classroom exercises to daily experiences is one way that confidence and goal-setting behavior can increase. As is evident from the camp post-test, camp attendees demonstrated that it is possible to increase confidence about money decisions and identify savings goals using innovative and fun educational approaches. The outcomes associated with the MONEY DAWGS camp suggest that increasing financial literacy efforts when young people are in middle school may be a way to improve financial outcomes. This is particularly true when the education is experiential and applicable to real-world decision making.

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