

How financial literacy varies among U.S. adults

The 2022 TIAA Institute-GFLEC Personal Finance Index

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Executive summary

The TIAA Institute-GFLEC Personal Finance Index (*P-Fin Index*) is an ongoing project now in its sixth year that annually assesses financial literacy among the U.S. adult population. The *P-Fin Index* is unique in its capacity to produce a robust measure of overall financial literacy plus a nuanced analysis of personal finance knowledge across eight areas in which individuals routinely function. The index relates to common financial situations that individuals encounter and can be viewed as a gauge of “working knowledge.” The *P-Fin Index* survey also includes indicators of financial well-being which enables examining the relationship between financial literacy and financial well-being.

Key findings include:

- Many Americans function with a poor level of financial literacy—a consistent finding over the first six years of the *P-Fin Index*. On average, U.S. adults correctly answered only 50% of the index questions in 2022. Eighteen percent correctly answered over 75% of the index questions, while 23% correctly answered 25% or fewer of the questions.
- Comprehending risk is again the area where functional knowledge tends to be lowest among U.S. adults. On average, 36% of these questions were answered correctly in 2022, a figure lower than its 2017 level (39%).
- Asian Americans were oversampled for the first time with the 2022 *P-Fin Index*, along with Black and Hispanic Americans. Financial literacy levels among Asian Americans and Whites tend to be equal; the former correctly answered 54% of the index questions, on average, and the latter 55%. Analogously, functional knowledge levels among Hispanic and Black Americans tend to be equal.
- Financial literacy tends to be low within each of the five generations comprising the U.S. adult population, but particularly so among those in early adulthood. The average percentage of *P-Fin Index* questions answered correctly in 2022 by Gen Z and Gen Y is 42% and 46%, respectively. The analogous figure among baby boomers and the Silent Generation is 54% for each.
- It is evident again that greater financial literacy tends to translate into higher financial well-being and lower financial literacy is generally associated with lower financial well-being. For example, compared to those with very high levels of financial literacy, those with very low levels are 6 times more likely to have difficulty making ends meet, 3 times more likely to be debt constrained, 3 times more likely to be unable to cope with a \$2,000 financial shock, 5 times more likely to lack emergency savings sufficient to cover one month of living expenses, and 4 times more likely to spend ten hours or more per week dealing with personal finance issues.
- The same link between financial literacy and financial well-being holds across race and ethnicity groups. For each well-being indicator, there is typically a double-digit decrease in the percentage of adults experiencing a poor personal finance outcome when comparing those with relatively high financial literacy to those with relatively low financial literacy across the four groups.

Introduction

Individuals are confronted with myriad financial decisions—big and small, simple and complex—in the normal course of life. Furthermore, the course of life is not always “normal” as evidenced by the COVID-19 pandemic and its economic consequences. In an environment of economic turbulence and uncertainty, the value of making appropriate financial decisions is only heightened. Financial literacy, in turn, is knowledge and understanding that enable sound financial decision making and effective management of personal finances. Thus, an individual’s financial well-being depends, at least in part, on his or her financial literacy.

The *TIAA Institute-GFLEC Personal Finance Index (P-Fin Index)*, a long-term project begun in 2017, is an annual barometer of financial literacy among the U.S. adult population.¹ The *P-Fin Index* relates to common financial situations that individuals encounter and can be viewed as a gauge of “working knowledge.” Beyond providing a robust measure of overall financial literacy, the index is unique in its capacity to produce a nuanced analysis of personal finance knowledge across eight areas in which individuals routinely function.^{2, 3}

1. Earning—determinants of wages and take-home pay.
2. Consuming—budgets and managing spending.
3. Saving—factors that maximize accumulations.
4. Investing—investment types, risk and return.
5. Borrowing/managing debt—relationship between loan features and repayments.
6. Insuring—types of coverage and how insurance works.
7. Comprehending risk—understanding uncertain financial outcomes.
8. Go-to information sources—recognizing appropriate sources and advice.

In addition to the core set of questions that assess financial literacy, the *P-Fin Index* survey contains questions that are indicators of financial well-being. This enables examining the relationship between financial literacy and financial well-being.

The *P-Fin Index* survey is fielded online in January each year with a sample of U.S. adults ages 18 and older. Responses are weighted to be nationally representative, and results are available across various socio-demographic segments of the population.⁴ The 2022 *P-Fin Index* survey was completed by a sample of 3,582 individuals.⁵ Black and Hispanic Americans, and for the first time Asian Americans, were oversampled for at least 500 respondents each.⁶ In addition, Gen Z was oversampled for at least 450 respondents age 18 or older.⁷

1 See Lusardi, Oggero and Yakoboski (2017) and Yakoboski, Lusardi and Hasler (2018, 2019, 2020, 2021).

2 These areas correspond to the National Standards for Financial Literacy outlined by the Council for Economic Education. See <http://councilforeconed.org/resource/national-standards-for-financial-literacy/>.

3 The index is based on responses to 28 questions, with three or four questions for each functional area. Each question is multiple choice with four response options: the correct answer, two incorrect answers and a “don’t know” option.

4 Table A1 in the appendix provides the weighted distribution of respondents to the 2022 survey across various socio-demographics.

5 The survey was fielded from January 6 to January 18, 2022, with a sample drawn from Ipsos’ KnowledgePanel, a large-scale probability-based online panel.

6 The 3,582 respondents included 512 Asian Americans, 548 Black Americans, 586 Hispanic Americans and 1,830 White Americans.

7 The 3,582 respondents consisted of 463 Gen Z (born 1997-2003), 767 Gen Y (1981-1996), 918 Gen X (1965-1980), 1,206 baby boomers (1946-1964) and 228 members of the Silent Generation (1927-1945).

This report:

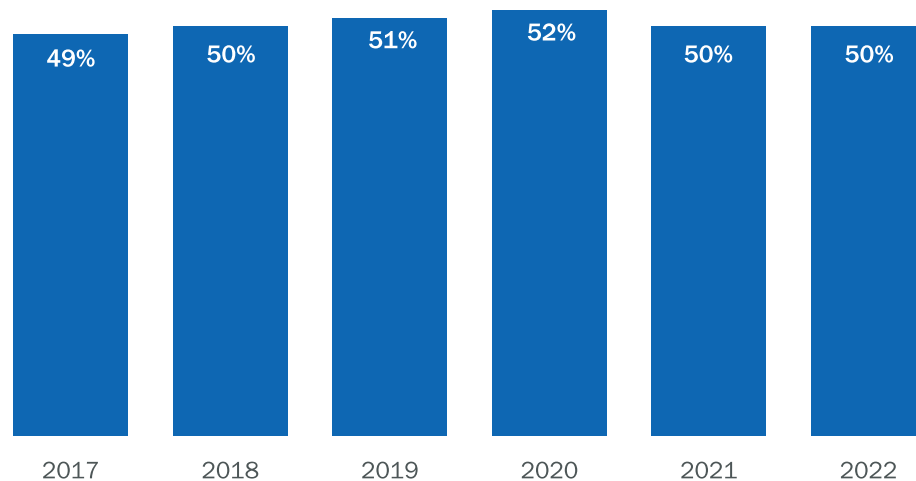
- Examines financial literacy and functional knowledge among U.S. adults and across various demographic subgroups, with a particular focus on comparisons across race and ethnicity as well as generations.
- Compares financial literacy across the six years of data collected thus far.
- Analyzes the relationship between financial literacy and financial well-being.

Overall financial literacy

Unfortunately, many Americans function with a poor level of financial literacy—a consistent finding over the first six years of the *P-Fin Index* (Figure 1). On average, U.S. adults correctly answered only 50% of the index questions in 2022. In fact, this figure has remained steady around the 50% mark since the initial 2017 survey. This is troubling since the *P-Fin Index* is a barometer of working knowledge related to financial situations encountered in the normal course of life.

Figure 1. Financial literacy among U.S. adults, 2017–2022

% of *P-Fin Index* questions answered correctly

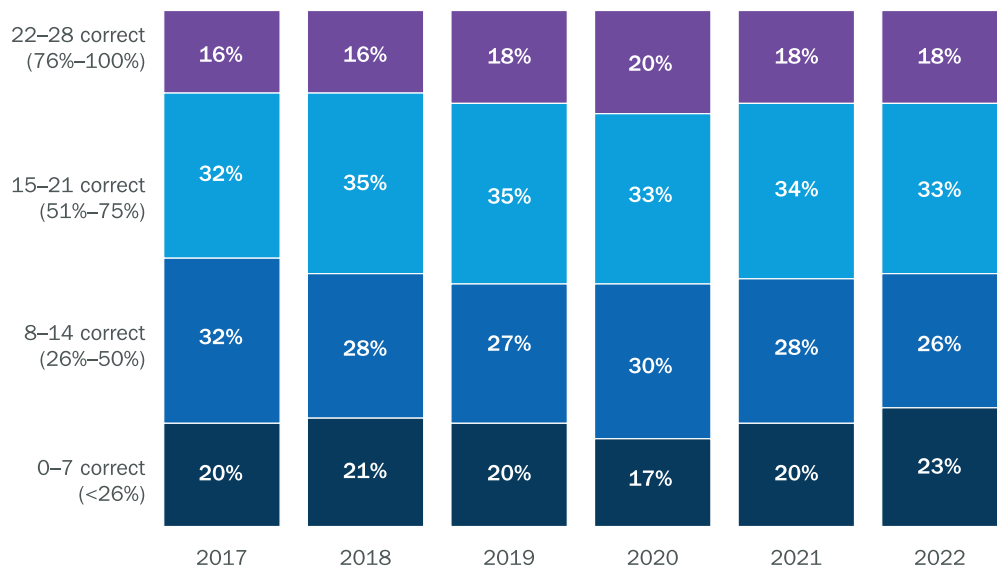


Source: TIAA Institute-GFLEC Personal Finance Index (2017–2022).

Likewise, the distribution of correct answers with the *P-Fin Index* has been relatively stable over the six years (Figure 2). With that said, more U.S. adults (23%) demonstrated a very low level of financial literacy (i.e., they correctly answered 7 or fewer of the 28 index questions) in 2022 than in any previous year. The difference in this figure compared to 2017 is statistically significant. At the same time, the percentage correctly answering over one-half of the index questions is slightly greater in 2022 (51%) than 2017 (48%), though the difference is not statistically significant.

Figure 2. Financial literacy among U.S. adults, 2017–2022

Distribution of correct answers to *P-Fin Index* questions



Source: TIAA Institute-GFLEC Personal Finance Index (2017-2022).

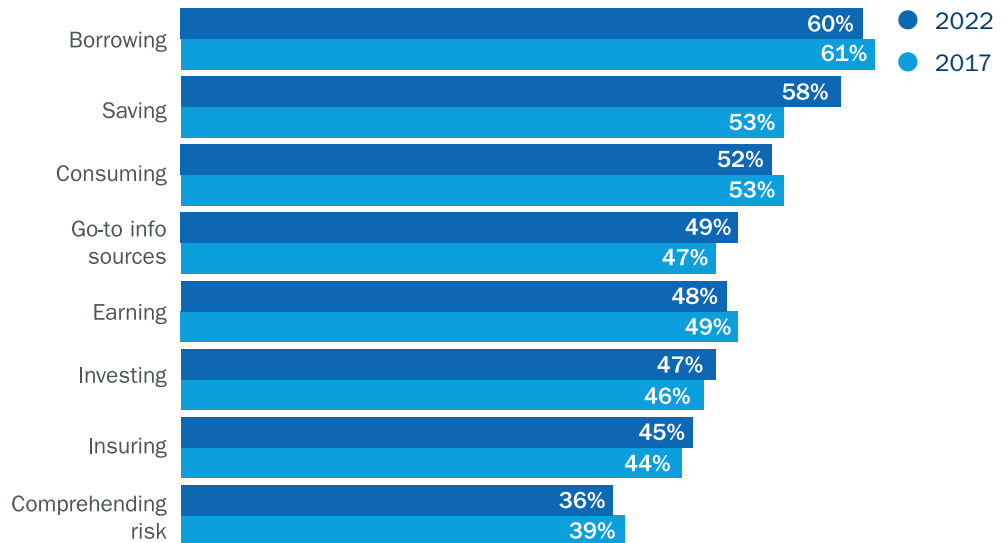
Comprehending risk is the area where functional knowledge consistently tends to be lowest among U.S. adults (Figure 3).⁸ On average, 36% of these questions were answered correctly in 2022, a figure lower than its 2017 level (39%).⁹ This is problematic since uncertainty is inherent in most aspects of personal finances and financial decision making. The outcomes associated with most choices are rarely known with certainty when decisions are made, so individuals would ideally be capable of making appropriate decisions in an environment of uncertainty.

⁸ Comprehending risk involves, for example, understanding that the expected outcome in a given scenario depends on the range of possible outcomes, the financial implication associated with each outcome and the likelihood of each outcome occurring.

⁹ This finding is consistent with other research identifying risk-related concepts as the most difficult for individuals to grasp. See Coppola, et al. (2017) and Lusardi (2015).

Figure 3. Functional knowledge, 2017 and 2022

% of P-Fin Index questions answered correctly



Source: TIAA Institute-GFLEC Personal Finance Index (2017, 2022).

At the other end of the spectrum, borrowing and debt management has been the area of greatest financial literacy in each year of the index thus far. On average, 60% of the borrowing questions were answered correctly in 2022; the analogous figure in 2017 was 61%. Debt tends to be a feature of personal finance common across the lifecycle for many individuals; knowledge and understanding may emerge from confronting accumulated debt, often from the early stages of adulthood. Saving and consuming are the other areas where financial literacy is above average (i.e., above the 50% average of correctly answered questions in the entire survey), and saving is also one of the areas where the percentage of correct answers is greater in 2022 than 2017 at a statistically significant level.¹⁰

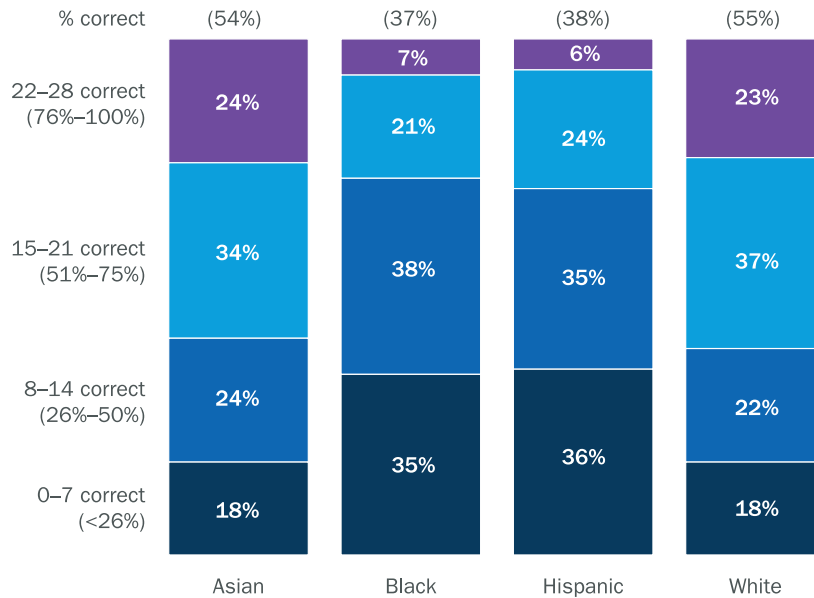
Demographic variations in financial literacy

Asian Americans were oversampled for the first time with the 2022 P-Fin Index. Financial literacy levels among Asian Americans and Whites tend to be equal (Figure 4). The former correctly answered 54% of the index questions, on average, and the latter 55%. Approximately one-quarter of Asian Americans and Whites have very high levels of financial literacy (i.e., they correctly answered 22 or more of the 28 index questions) and 18% of each have very low levels of financial literacy (i.e., they correctly answered 7 or fewer of the 28 index questions).

¹⁰ Go-to information sources is the other area where the percentage of correct answers is greater in 2022 than 2017 at a statistically significant level. Comprehending risk is the one area where the percentage of correct answers is lower at a statistically significant level.

Figure 4. Financial literacy by race and ethnicity

Distribution of correct answers to P-Fin Index questions



Source: TIAA Institute-GFLEC Personal Finance Index (2022).

Likewise, financial literacy levels among Black Americans and Hispanics tend to be equal, albeit at lower levels than Asian Americans and Whites. The former correctly answered 37% of the index questions in 2022, on average, and the latter 38%. Approximately one-third of each group have very low levels of financial literacy.

Top-level differences in financial literacy across race and ethnicity do not mean inherent differences in capability. There are demographic differences a level down across groups that matter, such as age, education and income distributions (appendix Figure A1). Beyond that, other dynamics which data do not capture are in play, including systemic factors and issues. A more rigorous empirical analysis points to this. The regression results presented in appendix Figure A2 show that financial literacy remains lower among Black Americans and Hispanics relative to their White peers after controlling for other socioeconomic factors such as household income and education. Asian Americans also have lower financial literacy levels compared to Whites after controlling for these other factors.

Analogous to overall financial literacy, functional knowledge levels among Asian Americans and Whites tend to be equal (Figure 5). Three areas where there is a statistically significant difference are earning and insuring (both with higher financial literacy among Whites) and comprehending risk (higher financial literacy among Asian Americans). Likewise, functional knowledge levels among Black Americans and Hispanics tend to be equal. Overall, the rank ordering of functional areas by financial literacy levels is very similar across the four groups. One difference that stands out is earnings being the second weakest area among Asian Americans, which is not the case with the other three groups.

Figure 5. Functional knowledge by race and ethnicity

% of P-Fin Index questions answered correctly

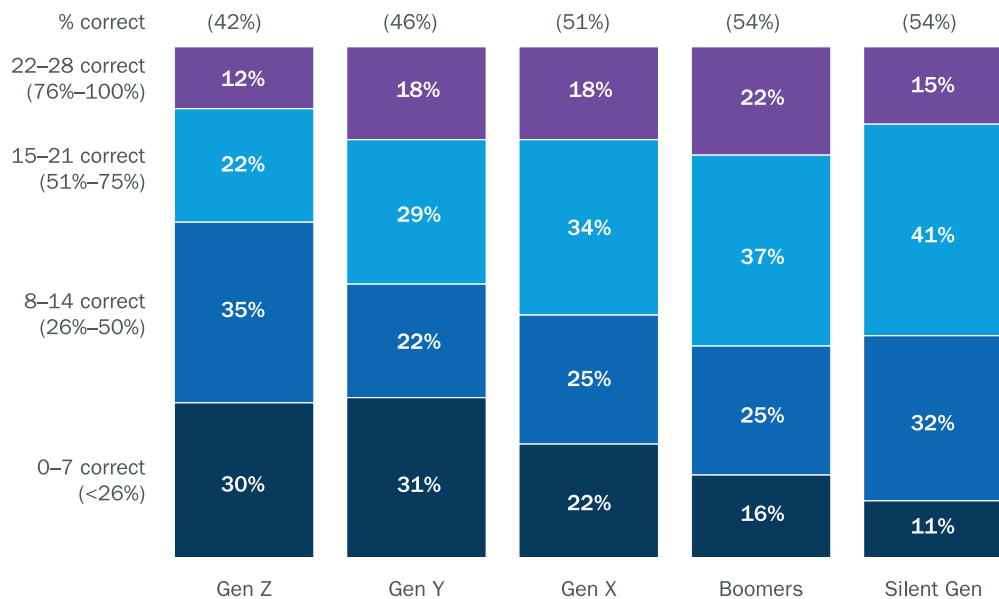
	Asian	Black	Hispanic	White
Borrowing	64% (2)	45% (1)	48% (1)	66% (1)
Saving	66% (1)	42% (2)	47% (2)	63% (2)
Consuming	54% (4)	42% (2)	44% (3)	55% (3)
Go-to info sources	55% (3)	37% (5)	36% (4)	54% (4)
Earning	46% (7)	38% (4)	36% (4)	53% (5)
Investing	53% (5)	33% (6)	34% (6)	52% (6)
Insuring	49% (6)	30% (7)	27% (8)	52% (6)
Comprehending risk	42% (8)	30% (7)	32% (7)	38% (8)

Source: TIAA Institute-GFLEC Personal Finance Index (2022).

The U.S. adult population spans five generations with six years of the Gen Z cohort now over age 18. Unfortunately, financial literacy tends to be low within each generation, but particularly so among those in early adulthood (Figure 6). The average percentage of P-Fin Index questions answered correctly in 2022 by Gen Z and Gen Y is 42% and 46%, respectively. The analogous figure among baby boomers and the Silent Generation is 54% for each. Furthermore, two-thirds of Gen Z could correctly answer only 50% or fewer of the index questions, with 30% correctly answering 25% or fewer; the analogous figures among baby boomers were significantly lower at 41% and 16%, respectively.

Figure 6. Financial literacy by generation

Distribution of correct answers to P-Fin Index questions



Source: TIAA Institute-GFLEC Personal Finance Index (2022).

It is important to note that generations are being used for age groups in examining and reporting financial literacy levels across the population. In this context, observed differences in financial literacy should be attributed to differing life stages across generations, as opposed to true generational differences. So the greater financial literacy that tends to exist among baby boomers and the Silent Generation relative to the younger generations reflects an increase in financial literacy that typically accrues as individuals advance through life.¹¹ True generational differences would mean differences when comparing generations at the same age range; six years of survey data is far too little for such comparisons. Unfortunately, these findings mean that the typical individual begins adulthood with a low level of financial literacy and it tends to remain low despite increasing over time.

The rank ordering of functional knowledge levels is similar across the five generations (Figure 7). With that said, one stark difference is that insuring is a relative strength among baby boomers and the Silent Generation while it is a particular weakness among Gen X, Gen Y, and Gen Z. In fact, it is the area with the largest generational gap. It is also noteworthy that comprehending risk is the one area where financial literacy levels are essentially equal across generations, albeit at very low levels.

Figure 7. Functional knowledge by generation

% of *P-Fin Index* questions answered correctly

	Gen Z	Gen Y	Gen X	Baby boomers	Silent Generation
Borrowing	52% (1)	56% (1)	61% (1)	66% (1)	64% (1)
Saving	50% (2)	54% (2)	59% (2)	63% (2)	61% (2)
Consuming	44% (4)	50% (3)	55% (3)	53% (4)	49% (6)
Go-to info sources	45% (3)	47% (4)	49% (4)	53% (4)	49% (6)
Earning	39% (5)	45% (5)	49% (4)	51% (7)	52% (5)
Investing	38% (6)	44% (6)	47% (6)	52% (6)	53% (4)
Insuring	29% (8)	38% (7)	45% (7)	54% (3)	58% (3)
Comprehending risk	35% (7)	35% (8)	36% (8)	36% (8)	37% (8)

Source: TIAA Institute-GFLEC Personal Finance Index (2022).

11 In appendix Figure A2, coefficient estimates for baby boomers and the Silent Generation are positive and statistically significant relative to Gen Z, indicating that these older groups score higher on the *P-Fin Index* even after controlling for other socioeconomic factors such as household income and education. At the same time, the differences in financial literacy between Gen X, Gen Y, and Gen Z are not statistically significant after accounting for these other factors.

Financial literacy levels also tend to vary with other socio-demographics in addition to generation (age) and race and ethnicity. Financial literacy tends to be greater among men, those with more education, those who have received financial education, those employed or retired, and those with higher household incomes (Figure 8). These patterns are consistent with variations identified in previous years of the *P-Fin Index* and other studies.^{12, 13}

Figure 8. Financial literacy by other socio-demographics

% of *P-Fin Index* questions answered correctly

GENDER	
Men	55%
Women	45%
EDUCATION	
Less than HS degree	31%
HS degree	38%
Some college	49%
College degree	65%
FINANCIAL EDUCATION	
Received financial education	60%
No financial education	46%
HOUSEHOLD INCOME	
Less than \$25k	30%
\$25k to \$49k	38%
\$50k to \$99k	51%
\$100k or more	60%
EMPLOYMENT STATUS	
Employed	53%
Unemployed or disabled	37%
Retired	52%

Source: TIAA Institute-GFLEC Personal Finance Index (2022).

12 See Lusardi and Mitchell (2007, 2011, 2014), Lusardi, Oggero and Yakoboski (2017), and Yakoboski, Lusardi and Hasler (2018, 2019, 2020, 2021).

13 See Lusardi and Mitchell (2014) for a discussion of existing research regarding the relationship between financial education programs and financial literacy levels, as well as the challenges inherent in empirically establishing causality and effectiveness of financial education.

Financial well-being and the P-Fin Index

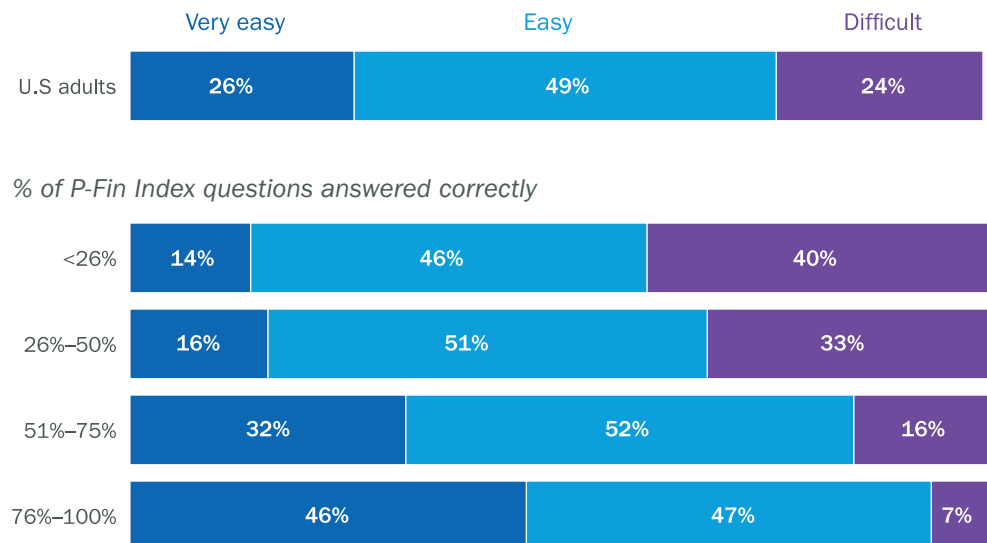
Consistent with *P-Fin Index* findings from the previous five years, it is evident again in the 2022 data that financial well-being is linked to financial literacy—greater financial literacy generally translates into greater financial well-being, and lower financial literacy is generally associated with lower financial well-being. For example, compared to those with a very high level of financial literacy (i.e., they correctly answered 22 or more of the 28 *P-Fin Index* questions), those with a very low level of financial literacy (i.e., they correctly answered 7 or fewer of the 28 questions) are:

- 6 times more likely to have difficulty making ends meet (Figure 9).
- 3 times more likely to be debt constrained (Figure 10).
- 3 times more likely to be financially fragile (Figure 11).
- 5 times more likely to lack emergency savings sufficient to cover one month of living expenses (Figure 12).
- 4 times more likely to spend ten hours or more per week thinking about and dealing with issues and problems related to personal finances (Figure 13).

Regression analysis confirms a statistically significant relationship between financial literacy as measured by the *P-Fin Index* and each of these financial well-being indicators. Figure A3 shows the results of the debt constraint regression, for example.

Figure 9. Financial literacy and financial well-being

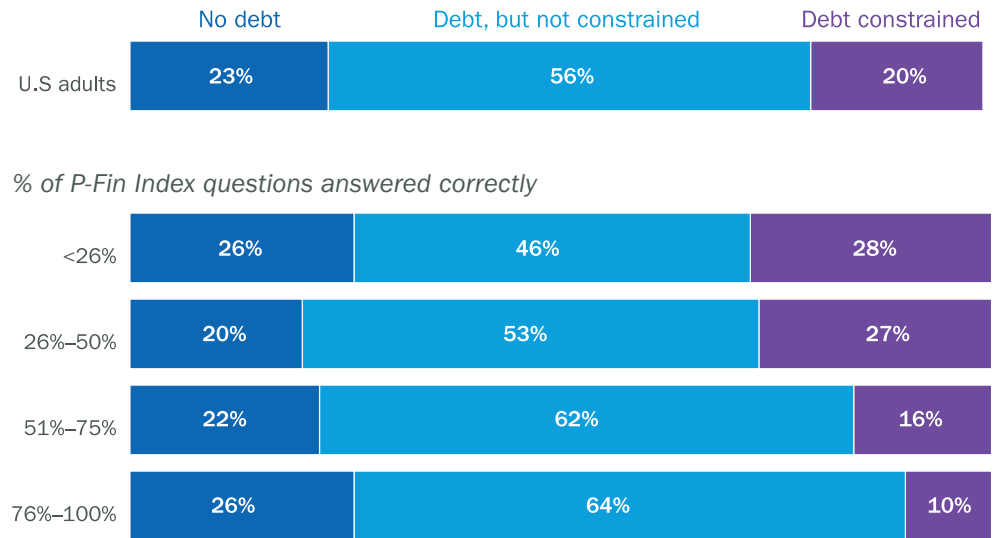
Ease or difficulty making ends meet in typical month



Source: TIAA Institute-GFLEC Personal Finance Index (2022).

Figure 10. Financial literacy and financial well-being

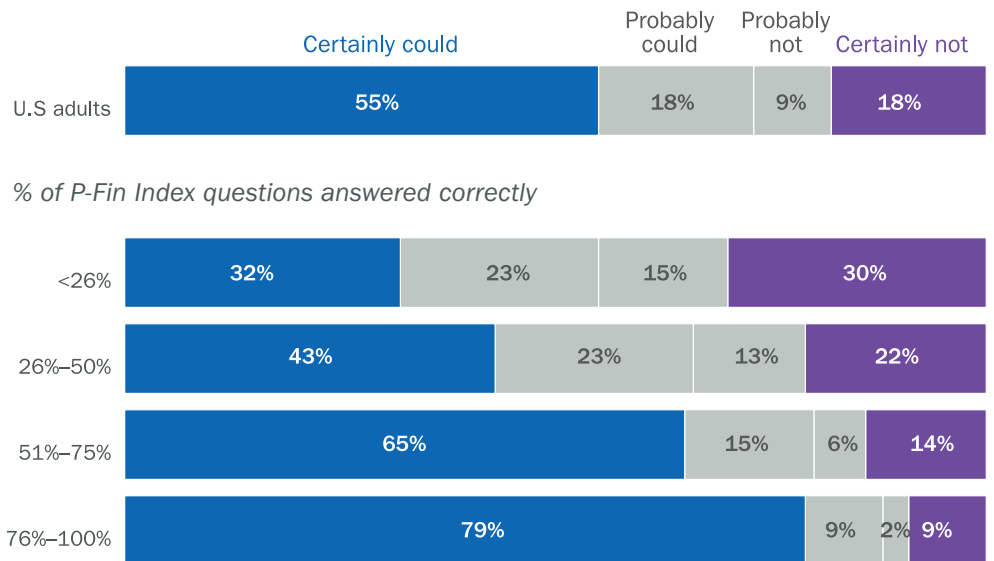
Debt payments prevent adequately addressing other financial properties



Source: TIAA Institute-GFLEC Personal Finance Index (2022).

Figure 11. Financial literacy and financial well-being

Ability or inability to come up with \$2,000 if an unexpected need arose within the next month



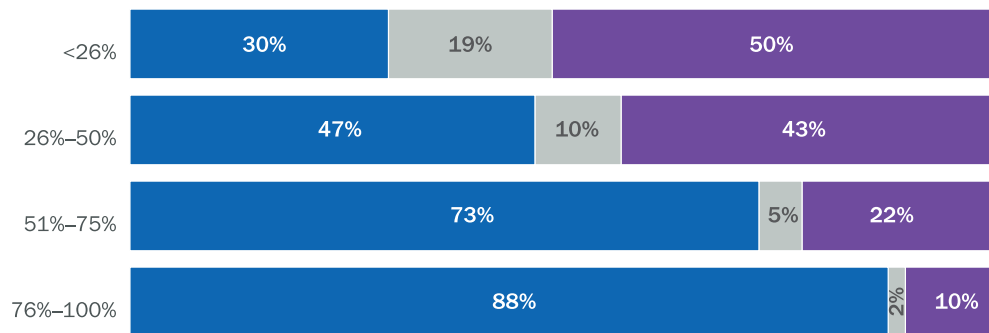
Source: TIAA Institute-GFLEC Personal Finance Index (2022).

Figure 12. Financial literacy and financial well-being

Have non-retirement savings sufficient to cover one month of living expenses if needed (non-retirees)



% of P-Fin Index questions answered correctly



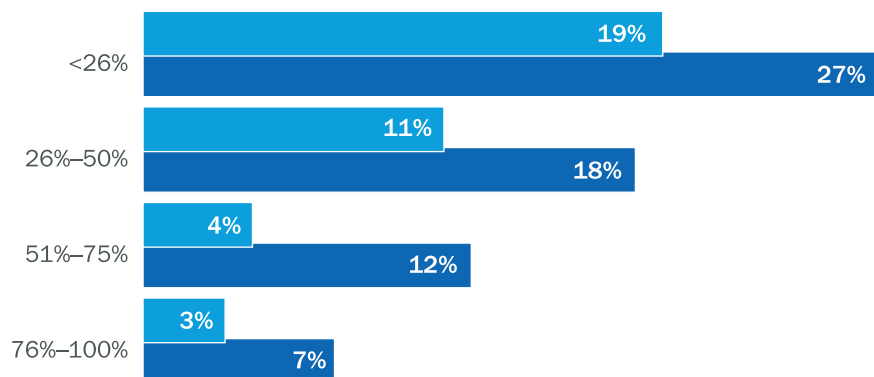
Source: TIAA Institute-GFLEC Personal Finance Index (2022).

Figure 13. Financial literacy and financial well-being

Time typically spent thinking about and dealing with issues and problems related to personal finances



% of P-Fin Index questions answered correctly

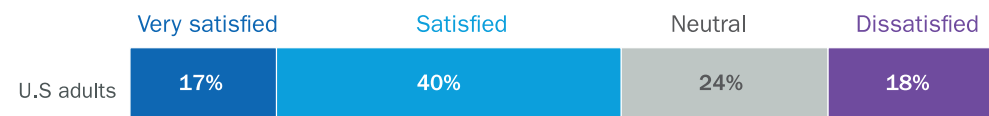


Source: TIAA Institute-GFLEC Personal Finance Index (2022).

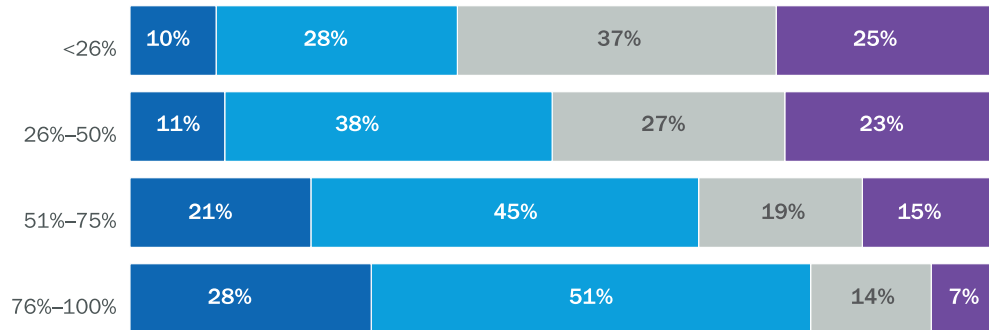
Overall, those with lower levels of financial literacy tend to be less satisfied with their current financial situation (Figure 14). Among those with a very low level of financial literacy, only 10% are very satisfied with their financial situation, while 25% are dissatisfied. The analogous figures are inverted among those with a very high level of financial literacy—28% are very satisfied, while 7% are dissatisfied.

Figure 14. Financial literacy and financial well-being

Satisfaction or dissatisfaction with current financial situation



% of P-Fin Index questions answered correctly



Source: TIAA Institute-GFLEC Personal Finance Index (2022).

The same link between financial literacy and financial well-being holds among Asian Americans, Black Americans, Hispanics and Whites (Figure 15).¹⁴ For each well-being indicator, there is typically a double-digit decrease in the percentage of adults experiencing a poor personal finance outcome when comparing those with relatively high financial literacy (i.e., they correctly answered over 50% of the index questions) to those with relatively low financial literacy (i.e., they correctly answered 50% or less of the index questions) across the four groups.¹⁵ Furthermore, these differences are more striking when considered in percentage terms. For example, 29% of Asian Americans with relatively low financial literacy find it difficult to make ends meet in a typical month. The analogous figure among Asian Americans with relatively high financial literacy is 19 percentage points lower at 10%. This means that difficulty making ends meet is 66% less common among Asian Americans with higher financial literacy compared to Asian Americans with lower financial literacy. (Percentage point differences and percentage differences between Asian Americans with relatively low and relatively high financial literacy are shown in appendix Figure A5 for the six financial well-being indicators. The analogous data points for Black Americans, Hispanics and Whites appear in Figures A6-A8, respectively.)

14 Appendix Figure A4 shows aggregate data for the financial well-being indicators across race and ethnicity groups.

15 The two instances of essentially no difference between those with relatively low and relatively high financial literacy were among Asian Americans regarding spending 10-plus hours on financial issues and among Hispanics regarding dissatisfaction with their current financial situation. All other differences in Figure 15 are statistically significant at least the 10% level (most are statistically significant at the 1% level).

Figure 15. Financial literacy and financial well-being (by race and ethnicity)

% of P-Fin Index questions answered correctly	Asian		Black		Hispanic		White	
	≤50%	>50%	≤50%	>50%	≤50%	>50%	≤50%	>50%
Find it difficult to make ends meet in typical month	29%	10%	39%	20%	42%	23%	33%	11%
Debt payments prevent adequately addressing other financial priorities	16%	11%	30%	21%	40%	27%	21%	11%
Certainly could not come up with \$2,000 for an unexpected need	17%	7%	32%	19%	20%	14%	26%	12%
No or not sure: have one month of expenses in non-retirement savings	62%	14%	71%	41%	67%	34%	53%	18%
Spend 10-plus hours per week on financial issues	12%	8%	28%	18%	24%	15%	20%	9%
Dissatisfied with current financial situation	16%	8%	29%	21%	27%	25%	22%	10%

Source: TIAA Institute-GFLEC Personal Finance Index (2022).

Not surprisingly, the link between financial literacy and financial well-being holds across generations, as well (Figure 16).¹⁶

16 Appendix Figure A9 shows aggregate data for the financial well-being indicators across generations.

Figure 16. Financial literacy and financial well-being (by generation)

% of P-Fin questions answered correctly	Gen Z		Gen Y		Gen X		Baby boomers		Silent Generation	
	≤50%	>50%	≤50%	>50%	≤50%	>50%	≤50%	>50%	≤50%	>50%
Find it difficult to make ends meet in typical month	37%	19%	44%	13%	38%	15%	30%	10%	17%	12%
Debt payments prevent adequately addressing other financial priorities	18%	14%	37%	17%	33%	17%	20%	10%	11%	7%
Certainly could not come up with \$2,000 for an unexpected need	25%	16%	32%	12%	24%	11%	23%	13%	11%	14%
No or not sure: have one month of expenses in non-retirement savings	77%	26%	65%	23%	54%	21%	41%	17%	36%	10%
Spend 10-plus hours per week on financial issues	18%	9%	33%	13%	22%	11%	16%	9%	12%	8%
Dissatisfied with current financial situation	21%	13%	33%	15%	27%	13%	18%	9%	9%	13%

Source: TIAA Institute-GFLEC Personal Finance Index (2022).

Increased financial literacy is not a panacea for poor financial well-being. Clearly, resources matter, as do access and opportunity in the financial system. At the same time, these findings demonstrate that the ability to make sound, appropriate financial decisions matters as well. One could even argue that this is particularly important among those with modest incomes and limited resources with which to work.

Discussion

Financial well-being is a goal shared across society. We want it for ourselves, our families, and our communities. Employers want it for their employees. It is the common objective of many advocacy organizations, as well as the objective of many businesses for their clients. Achieving financial well-being is not straightforward and simple, however. It is not just a matter of having a good job and enough money. Certainly resources matter. So too does access and opportunity in the financial system. But so too does the ability to make sound, appropriate financial decisions. The value of making appropriate financial decisions is only heightened in an environment of economic turbulence and uncertainty, such as that experienced during the COVID-19 pandemic.

This is why financial literacy matters. Financial literacy is knowledge and understanding that enable sound financial decision making and effective management of personal finances. As such, financial literacy enables and promotes financial well-being. The data from the first six years of the *P-Fin Index* is clear on this point—those with greater financial literacy tend to have greater financial well-being, while those with lower financial literacy tend to have lower financial well-being.

Unfortunately, many individuals are functioning with a poor level of financial literacy. A consistent finding of the *P-Fin Index* is that U.S. adults correctly answer only about one-half of the index questions. This is troubling since the *P-Fin Index* measures working knowledge in areas where individuals inherently function during the normal course of life. Another consistent and unfortunate finding is that financial literacy tends to be lowest in the realm of comprehending and understanding risk and uncertainty. This is problematic since uncertainty is inherent in most aspects of personal finances and financial decision making, not just saving and investing. Individuals would ideally be capable of making appropriate decisions in an environment of uncertainty.

Financial literacy is generally low across socio-demographic groups. With that said, it tends to be even lower among some groups—women relative to men, Black and Hispanic Americans relative to Whites and Asian Americans, younger adults relative to older adults. This does not reflect inherent differences in capability, and systemic factors are often involved.

But why would one expect a generally high level of financial literacy in society? After all, very few adults—28%—have ever participated in a financial education program. The good news is this figure is 35% among Gen Z, significantly greater than the four older generations. But that's still only one-third of individuals at the beginning of adulthood, making decisions that have both short- and long-term financial implications, who have received some form of financial education.

This reality is a call to action. One way to equip the young with the knowledge necessary to make the many financial decisions they will face is to promote financial education in primary and secondary education, as well as postsecondary. Those out of school can be reached through work-based programs, as well as programs through community-based organizations. Financial education programs should be designed from a diversity and inclusion perspective so that the particular needs and circumstances of different socio-demographic groups are factored into content and delivery. No matter the program, no matter the target audience, helping individuals become comfortable functioning in the context of risk and uncertainty should be one of the key objectives. In sum, while not a cure-all, increased financial literacy can lead to improved financial practices that benefit even those with modest or limited resources.

Appendix

Figure A1. Distribution of respondent demographics in the 2022 P-Fin Index (weighted sample)

	All	Asian American	Black American	Hispanic	White
GENERATION					
Gen Z	11%	12%	11%	16%	10%
Gen Y (millennials)	26	30	32	31	24
Gen X	26	27	25	31	24
Baby boomers	31	27	28	19	35
Silent Generation	6	4	4	2	8
GENDER					
Male	48%	46%	46%	50%	49%
Female	52	54	54	50	51
EDUCATION					
Less than HS degree	10%	7%	10%	25%	6%
High school degree	28	18	34	32	37
Some college	27	18	30	25	28
College degree	35	58	26	18	39
HOUSEHOLD INCOME					
Less than \$25,000	13%	9%	22%	14%	11%
\$25,000 to \$49,999	17	11	21	22	15
\$50,000 to \$99,999	30	25	30	33	29
\$100,000 or more	41	55	28	31	45
EMPLOYMENT STATUS					
Employed	57%	61%	55%	60%	56%
Unemployed or disabled	16	15	20	25	14
Retired	26	23	24	15	30
ETHNICITY					
Asian American	6%	100%	-	-	-
Black American	12	-	100%	-	-
Hispanic	17	-	-	100%	-
White	63	-	-	-	100%
Other	2	-	-	-	-

Source: TIAA Institute-GFLEC Personal Finance Index (2022).

Figure A2. Regression analysis

Dependent variable: Percentage of P-Fin Index questions answered correctly	
RACE/ETHNICITY (REF.: WHITE)	
Asian American	-4.319*** (1.419)
Black American	-11.251*** (1.136)
Hispanic	-8.580*** (1.212)
Other	-0.086 (1.959)
AGE (REF.: GEN Z)	
Gen Y	-1.687 (1.651)
Gen X	2.621 (1.669)
Baby boomers	6.963*** (1.854)
Silent Generation	5.878** (2.396)
EDUCATION (REF.: LESS THAN HS)	
High School	1.533 (1.680)
Some college	9.585*** (1.727)
Bachelor's degree or higher	22.688*** (1.804)
INCOME (REF.: <\$25K)	
\$25–50K	3.412** (1.517)
\$50K–100K	11.736*** (1.493)
>\$100K	14.885*** (1.603)
WORK STATUS (REF.: EMPLOYED)	
Unemployed or disabled	-1.795 (1.276)
Retired	-0.791 (1.288)
MARITAL STATUS (REF.: MARRIED)	
Single	-1.593 (1.250)
Widowed/divorced/separated	-2.306* (1.225)
CHILDREN UNDER AGE 18	
Yes	-1.637 (1.024)
Constant	30.722*** (2.417)
Observations	3,534
R-squared	0.321

Notes: Estimated regression coefficients are compared to the following reference values (Ref.): White for the Race/Ethnicity variable, Gen Z for the age variable, household income of less than \$25,000 for the income variable, having less than a high school degree for the educational attainment variable, employed for the work status variable, and being married for the marital status variable. Robust standard errors in parentheses: *p<0.10, **p<0.05, ***p<0.01.

Source: TIAA Institute-GFLEC Personal Finance Index (2022).

Figure A3. Regression analysis

Dependent variable: Debt constrained	
Total # of P-Fin Index questions correct	-0.003*** (0.001)
RACE/ETHNICITY (REF.: WHITE)	
Asian American	-0.022 (0.019)
Black American	0.067*** (0.024)
Hispanic	0.145*** (0.024)
Other	0.041 (0.041)
AGE (REF.: GEN Z)	
Gen Y	0.109*** (0.029)
Gen X	0.091*** (0.031)
Baby boomers	0.032 (0.034)
Silent Generation	0.013 (0.042)
EDUCATION (REF.: LESS THAN HS)	
High School	-0.048 (0.037)
Some college	-0.054 (0.036)
Bachelor's degree or higher	-0.063* (0.037)
INCOME (REF.: <\$25K)	
\$25–50K	0.052 (0.032)
\$50K–100K	-0.059** (0.029)
>\$100K	-0.151*** (0.030)
WORK STATUS (REF.: EMPLOYED)	
Unemployed or disabled	-0.082*** (0.025)
Retired	-0.098*** (0.021)
MARITAL STATUS (REF.: MARRIED)	
Single	-0.035 (0.024)
Widowed/divorced/separated	-0.018 (0.024)
CHILDREN UNDER AGE 18	
Yes	0.017 (0.019)
Constant	0.315*** (0.050)
Observations	3,519
R-squared	0.112

Notes: Estimated regression coefficients are compared to the following reference values (Ref.): White for the Race/Ethnicity variable, Gen Z for the age variable, household income of less than \$25,000 for the income variable, having less than a high school degree for the educational attainment variable, employed for the work status variable, and being married for the marital status variable. Robust standard errors in parentheses: *p<0.10, **p<0.05, ***p<0.01.

Source: TIAA Institute-GFLEC Personal Finance Index (2022).

Figure A4. Financial well-being by race and ethnicity

	Asian	Black	Hispanic	White
Find it difficult to make ends meet in typical month	18%	34%	37%	20%
Debt payments prevent adequately addressing other financial priorities	13%	27%	36%	15%
Certainly could not come up with \$2,000 for an unexpected need	11%	28%	19%	17%
No or not sure: have one month of expenses in non-retirement savings	35%	63%	58%	32%
Spend 10-plus hours per week on financial issues	10%	25%	21%	13%
Dissatisfied with current financial situation	11%	27%	26%	15%

Source: TIAA Institute-GFLEC Personal Finance Index (2022).

Figure A5. Financial literacy and financial well-being (by race and ethnicity)

	Asian American			
% of P-Fin Index questions answered correctly	≤50%	>50%	% point difference	% difference
Find it difficult to make ends meet in typical month	29%	10%	-19	-66%
Debt payments prevent adequately addressing other financial priorities	16%	11%	-5	-31%
Certainly could not come up with \$2,000 for an unexpected need	17%	7%	-10	-59%
No or not sure: have one month of expenses in non-retirement savings	62%	14%	-48	-77%
Spend 10-plus hours per week on financial issues	12%	8%	-4	-33%
Dissatisfied with current financial situation	16%	8%	-8	-50%

Source: TIAA Institute-GFLEC Personal Finance Index (2022).

Figure A6. Financial literacy and financial well-being (by race and ethnicity)

	Black American			
% of P-Fin Index questions answered correctly	≤50%	>50%	% point difference	% difference
Find it difficult to make ends meet in typical month	39%	20%	-19	-49%
Debt payments prevent adequately addressing other financial priorities	30%	21%	-9	-30%
Certainly could not come up with \$2,000 for an unexpected need	32%	19%	-13	-41%
No or not sure: have one month of expenses in non-retirement savings	71%	41%	-30	-42%
Spend 10-plus hours per week on financial issues	28%	18%	-10	-36%
Dissatisfied with current financial situation	29%	21%	-8	-28%

Source: TIAA Institute-GFLEC Personal Finance Index (2022).

Figure A7. Financial literacy and financial well-being (by race and ethnicity)

		Hispanic		
% of <i>P-Fin Index</i> questions answered correctly	≤50%	>50%	% point difference	% difference
Find it difficult to make ends meet in typical month	42%	23%	-19	-45%
Debt payments prevent adequately addressing other financial priorities	40%	27%	-13	-33%
Certainly could not come up with \$2,000 for an unexpected need	20%	14%	-6	-30%
No or not sure: have one month of expenses in non-retirement savings	67%	34%	-33	-49%
Spend 10-plus hours per week on financial issues	24%	15%	-9	-38%
Dissatisfied with current financial situation	27%	25%	-2	-7%

Source: TIAA Institute-GFLEC Personal Finance Index (2022).

Figure A8. Financial literacy and financial well-being (by race and ethnicity)

		White		
% of <i>P-Fin Index</i> questions answered correctly	≤50%	>50%	% point difference	% difference
Find it difficult to make ends meet in typical month	33%	11%	-22	-67%
Debt payments prevent adequately addressing other financial priorities	21%	11%	-10	-48%
Certainly could not come up with \$2,000 for an unexpected need	26%	12%	-14	-54%
No or not sure: have one month of expenses in non-retirement savings	53%	18%	-35	-66%
Spend 10-plus hours per week on financial issues	20%	9%	-11	-55%
Dissatisfied with current financial situation	22%	10%	-12	-55%

Source: TIAA Institute-GFLEC Personal Finance Index (2022).

Figure A9. Financial well-being by generation

	Gen Z	Gen Y	Gen X	Baby boomers	Silent Generation
Find it difficult to make ends meet in typical month	31%	29%	26%	18%	14%
Debt payments prevent adequately addressing other financial priorities	17%	28%	25%	14%	9%
Certainly could not come up with \$2,000 for an unexpected need	22%	22%	17%	17%	13%
No or not sure: have one month of expenses in non-retirement savings	60%	45%	37%	26%	26%
Spend 10-plus hours per week on financial issues	15%	23%	16%	11%	10%
Dissatisfied with current financial situation	18%	24%	20%	12%	11%

Source: TIAA Institute-GFLEC Personal Finance Index (2022).

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