

Millennial Financial Literacy and Fin-tech Use: Who Knows What in the Digital Era

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Measuring Financial Literacy in the U.S.

The TIAA Institute-GFLEC Personal Finance Index

The TIAA Institute-GFLEC Personal Finance Index (P-Fin Index)

The TIAA Institute-GFLEC Personal Finance Index: A New Measure of Financial Literacy

Annamaria Lusardi, The George Washington University School of Business and Global Financial Literacy Excellence Center (GFLEC)
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Paul J. Yakoboski, TIAA Institute



Financial Literacy among U.S. Hispanics:
New Insights from the *Personal Finance (P-Fin) Index*

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TIAA Institute

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Released
in 2017



The 2018 TIAA Institute-GFLEC Personal Finance Index

The State of Financial Literacy Among U.S. Adults

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New Insights from the 2018 *P-Fin Index*

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- As a joint project of the TIAA Institute and GFLEC we have designed an index of personal finance.
- The survey started in 2017 as an annual project that will result in cross-sectional trend data.

What makes the P-Fin Index unique?

The *P-Fin Index* measures knowledge and understanding which enable sound financial decision-making and effective management of personal finances.

- Most comprehensive measure of financial literacy and unique in the breath of topics covered.
- Complements simpler measures of financial literacy.
- Examines financial literacy across eight areas in which individuals routinely function.
- 28 financial literacy questions, with 3 or 4 devoted to each functional area.

Second wave:

- Online survey fielded in January 2018 with a nationally representative sample of U.S. adults, ages 18 and older, and completed by 1,012 individuals.
- Oversample in 2018: Millennials (1,007 participants) and addition of fin-tech questions.

The *P-Fin Index's* 28 questions cover eight functional areas:

1. Earning
2. Consuming
3. Saving
4. Investing
5. Borrowing
6. Insuring
7. Comprehending risk
8. Go-to information sources

Comprehending risk - Sample question

Investment A will deliver a return of either 10% or 6%, with each outcome equally likely. Investment B will deliver a return of either 12% or 4%, with each outcome equally likely. You can expect to earn more by investing in which?

- Investment A (chosen by 23%)
- Investment B (chosen by 14%)
- **It does not matter – expected return is the same with each (correct answer; chosen by 29% of respondents)**
- Don't know (chosen by 33% of respondents)

Comprehending risk is the functional area where financial literacy tends to be **lowest** (over time and across the population).

Risk-related concepts are the most difficult for people to grasp.

The State of Financial Literacy among U.S. Adults

Findings from the 2017 and 2018 P-Fin Index

P-Fin Index in 2017 and 2018 (1)

*% of P-Fin questions
answered correctly*



U.S. adults answered **one-half** of the P-Fin Index questions correctly, on average.

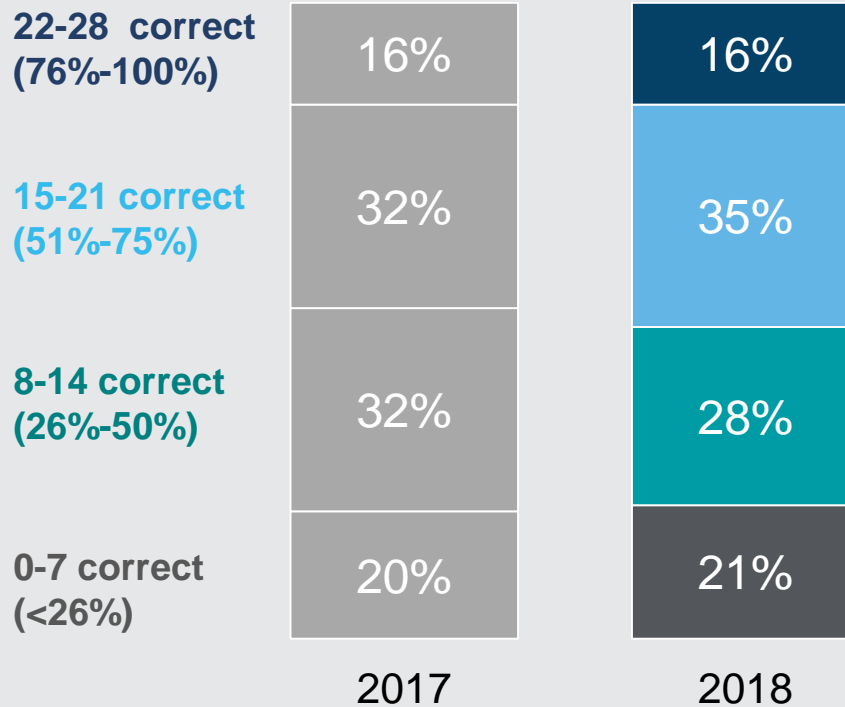
Financial literacy levels are unchanged.

- Lack of improvement is disappointing, but not unexpected given the timeframe.
- The survey questions function well and produce a robust measure of financial literacy across years.

Source: 2018 P-Fin Index,
general population

P-Fin Index in 2017 and 2018 (2)

Distribution of correct answers to P-Fin questions

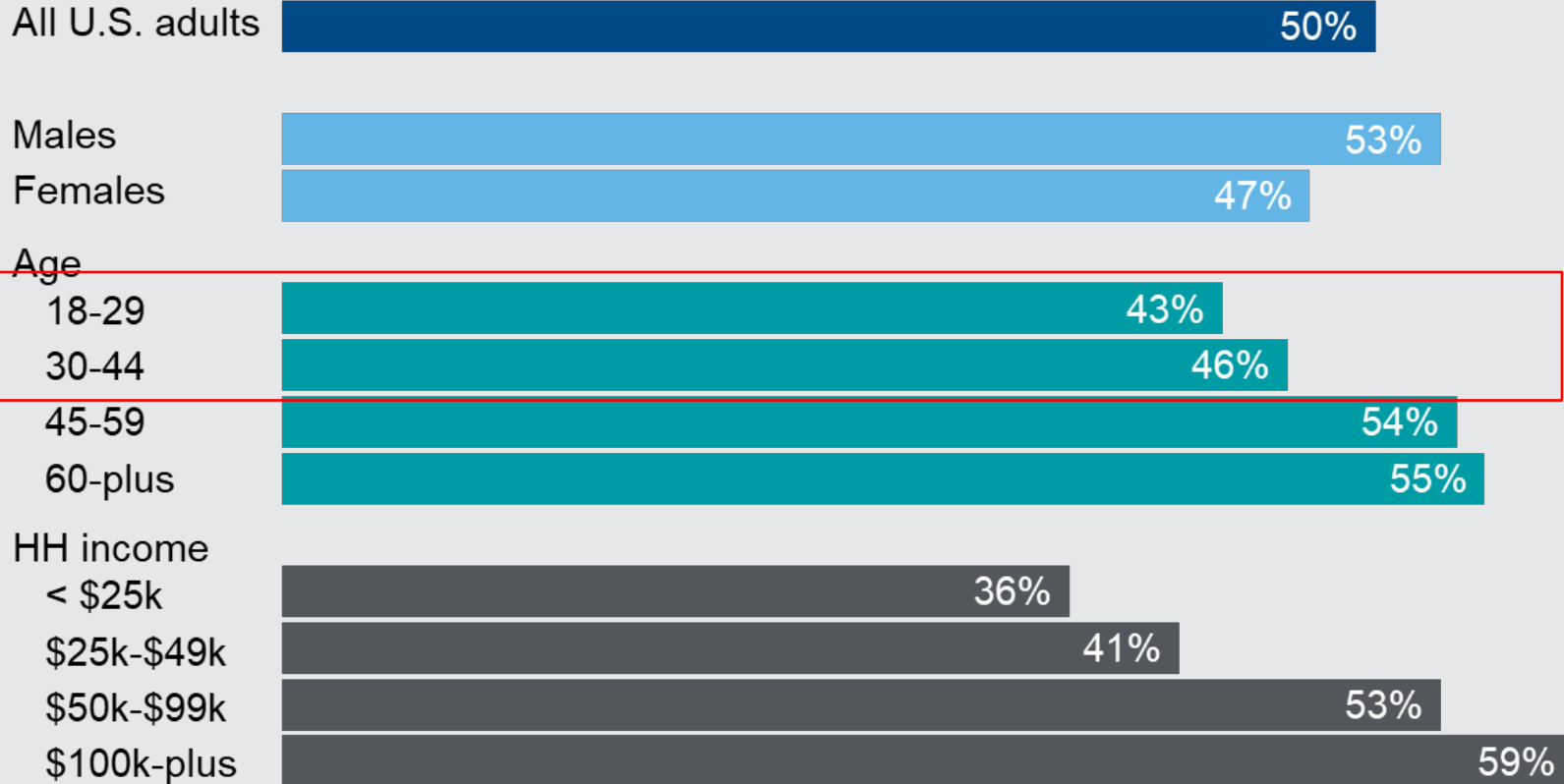


- U.S. adults are split **50/50** between those who could and those who could not answer one-half of the P-Fin Index questions correctly.
- 16% of Americans demonstrated a relatively **high** level of personal finance knowledge; 21% have a relatively **low** level of knowledge.

Source: 2018 P-Fin Index, general population

Demographic comparison – P-Fin Index 2018

% of P-Fin questions answered correctly



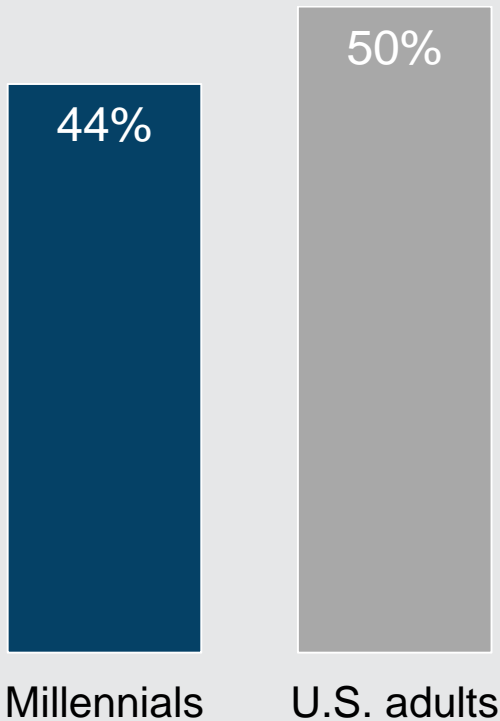
Source: 2018 P-Fin Index

Millennial Financial Literacy and Fin-tech Use

Who Knows What in the Digital Era

P-Fin Index in 2018 (1)

*% of P-Fin questions
answered correctly*



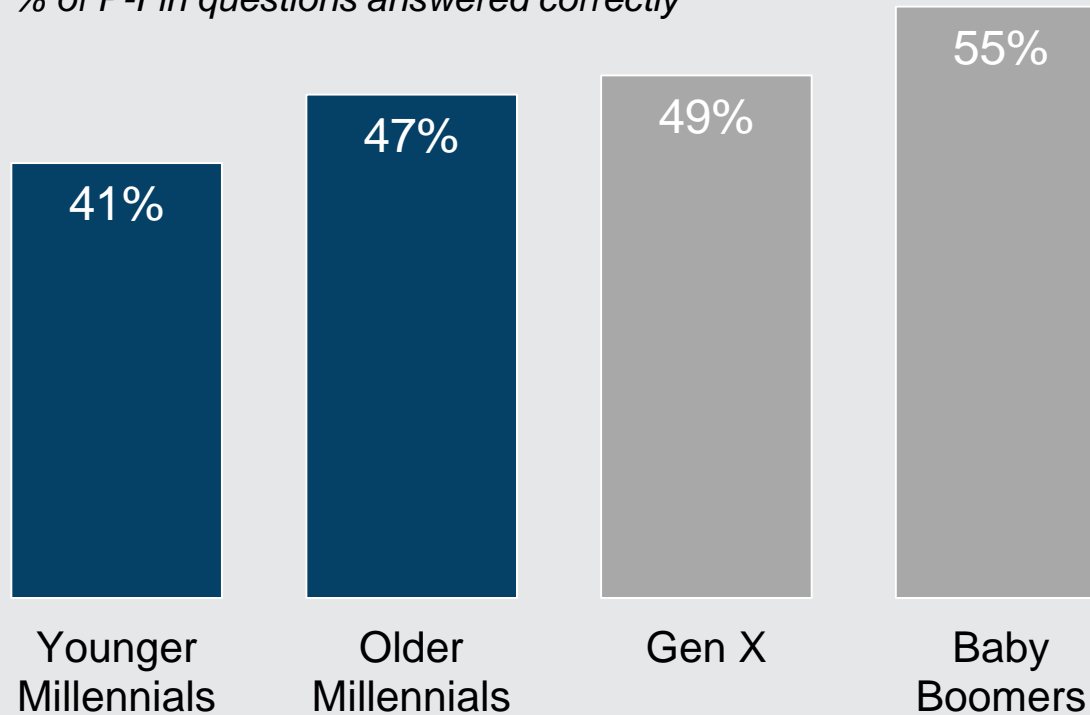
While U.S. adults answered only one-half of *P-Fin Index* questions correctly, on average, this figure is even lower among Millennials at 44%.

Age range for Millennials:
18 – 37 year old individuals

Source: 2018 P-Fin Index,
general population and
Millennial oversample

P-Fin Index in 2018 by generation

% of P-Fin questions answered correctly



(18 - 27 year olds)

(28 - 37 year olds)

Notable difference exists between younger and older Millennials.

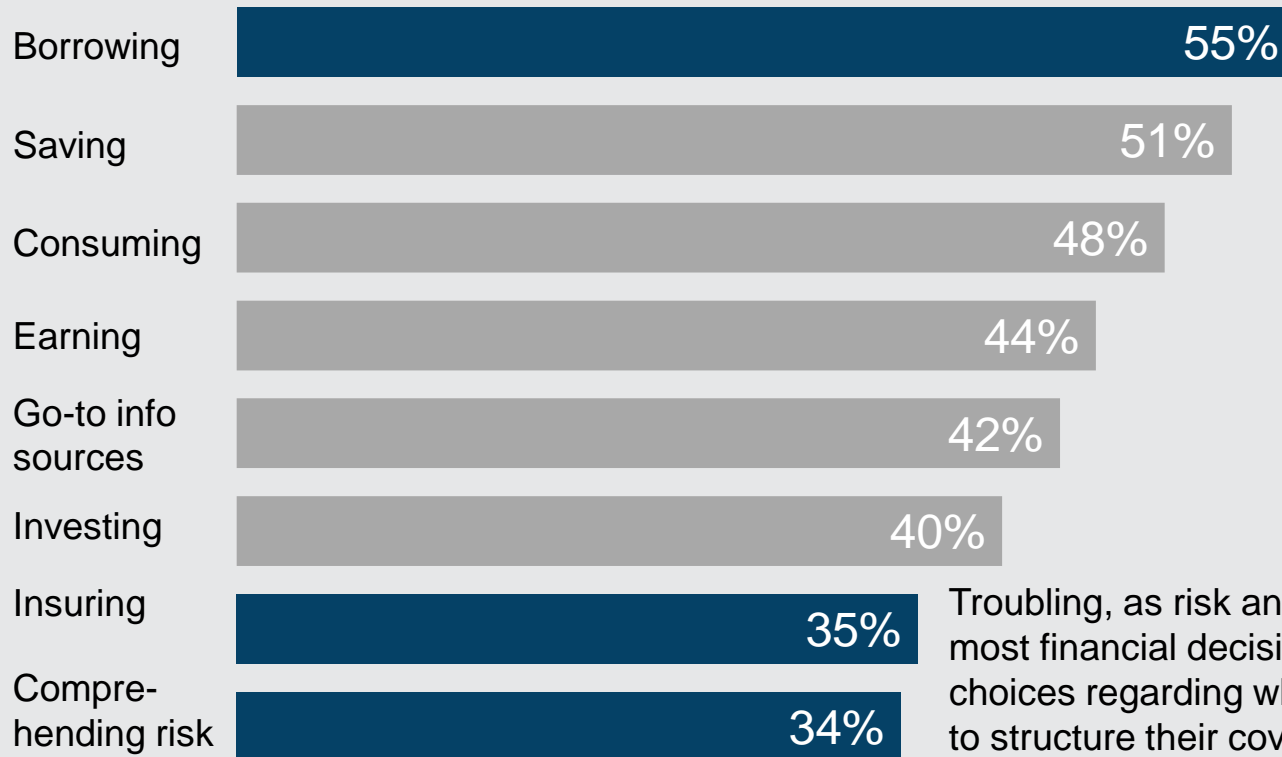
Financial literacy of older Millennials mirrors that of Gen X.

Increasing financial knowledge with age is consistent with other surveys. However, the difference shows that there is large variation within Millennials.

Source: 2018 P-Fin Index, general population and Millennial oversample

Functional knowledge

% of P-Fin questions answered correctly



Holding debt is common across the life cycle and people are confronted with debt often from early in life.

Troubling, as risk and uncertainty are inherent in most financial decisions. Individuals face many choices regarding which events to insure and how to structure their coverage, or how to invest their retirement savings.

Source: 2018 P-Fin Index

Fin-tech activities

How often (never, sometimes, frequently) do you use your smartphone to do the following:

Transactional activities:

- Deposit checks into a bank account
- Send or receive money from friends, family or other individuals
- Pay for a product or service in person at a store, gas station, or restaurant, i.e., making mobile payments
- Pay bills

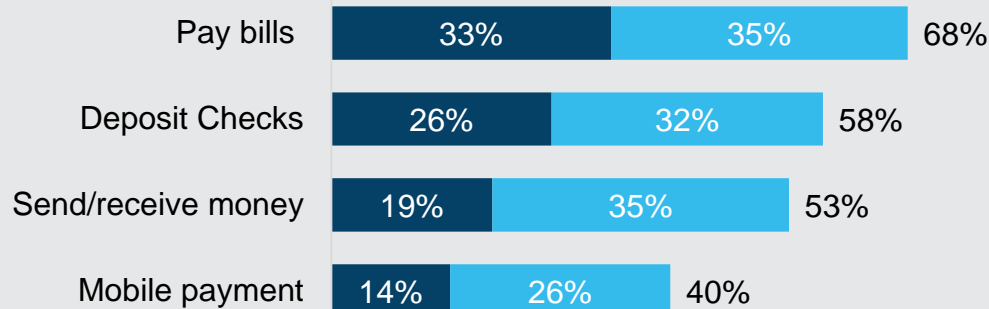
Informational activities:

- Track the amount you spend and what you spend it on
- Compare prices or product features when shopping
- Check your credit score
- Get personalized investment advice

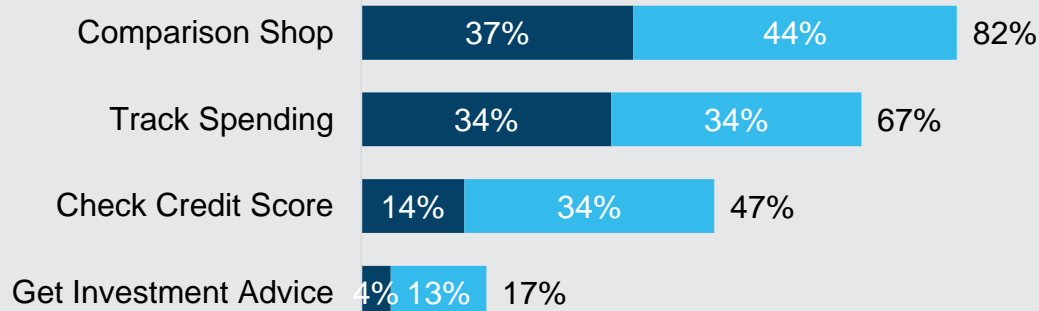
Millennial fin-tech activities

% of Millennials using their smartphone to...

Transactional



Informational



■ Frequently ■ Sometimes

Across age: The use of fin-tech activities are more common among **older** than younger Millennials.

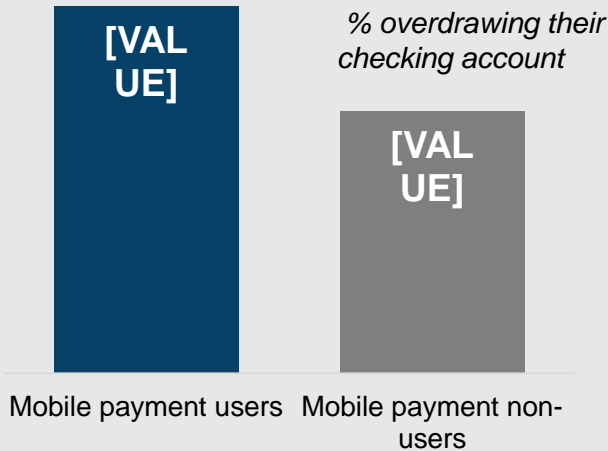
Little or no consistent variation by demographics or financial literacy in fin-tech use.

Fin-tech activities (which vary in purpose and nature) attract **different users** with different needs and economic circumstances.

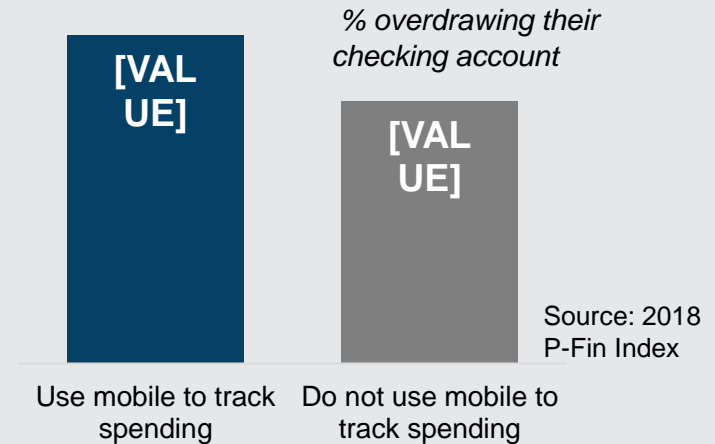
Source: 2018 P-Fin Index

Fin-tech and personal finance outcomes

Mobile payment



Track spending

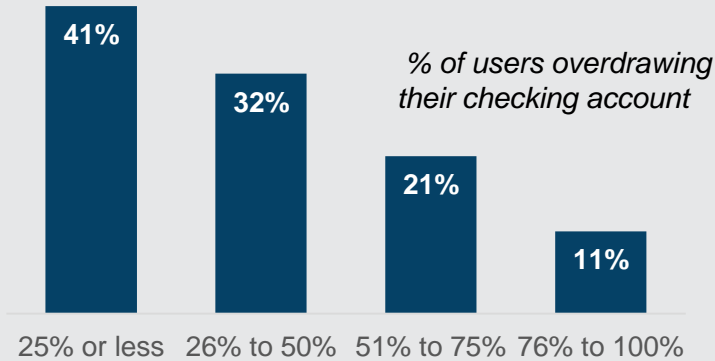


Source: 2018 P-Fin Index

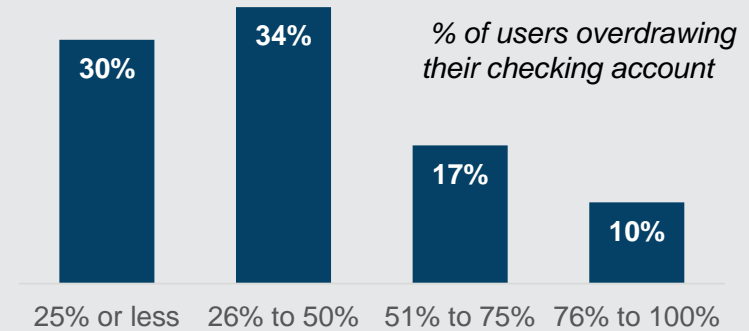
- Millennials who make mobile payments are more likely to overdraw their checking account.
- Significant difference even when controlling for demographic factors (such as gender, income, education, employment status).
- Track spending is expected to improve cash flow management, but users are not less likely to overdraw their checking account (difference is not statistically significant).
- Just correlation, but no causality measured: We cannot say whether fin-tech use increases the likelihood of poorer personal finance practices.

Role of financial literacy

Mobile payment



Track spending



Occasionally overdrawing checking account

Uses m-payments



Financial literacy



Financially literate mobile payment users



- Financial literacy is highly correlated with positive personal finance outcomes:
 - less likely to be financially fragile
 - less likely to overdraw checking account
 - more likely to plan for retirement
 - more likely to have non-retirement financial investments.
- Respondents who use mobile payments and are financially literate are much less likely to overdraw their checking accounts.

Conclusion

- Millennials experience **low** financial literacy rates, even though they must make numerous financial decisions.
- Fin-tech activities are attracting segments of customers who have different needs and characteristics; providing **opportunities** for innovation that can be targeted by fin-tech developers.
- Important question: Does fin-tech increase the risk of financial **mismanagement**?
 - Study indicates that mobile payment users are at a much higher risk of poor money management compared to non-users (even after controlling for socio-demographic factors).
 - However, our data cannot be used to establish any causal link between use of mobile payment and financial outcomes.
- While mobile payment users are more likely to experience financial distress and display poor financial management, the result **reverses** for those who are financially literate.
- This highlights the important role of financial literacy in the expansion of the fin-tech industry and the fact that fin-tech should be viewed as a **complement** to, not a substitute for, financial literacy.

Thank you!

Questions? Contact me at ahasler@gwu.edu

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