

Understanding the Debt: An analysis of young borrower's loan knowledge and the Impact of High School Financial education and Parental educational level

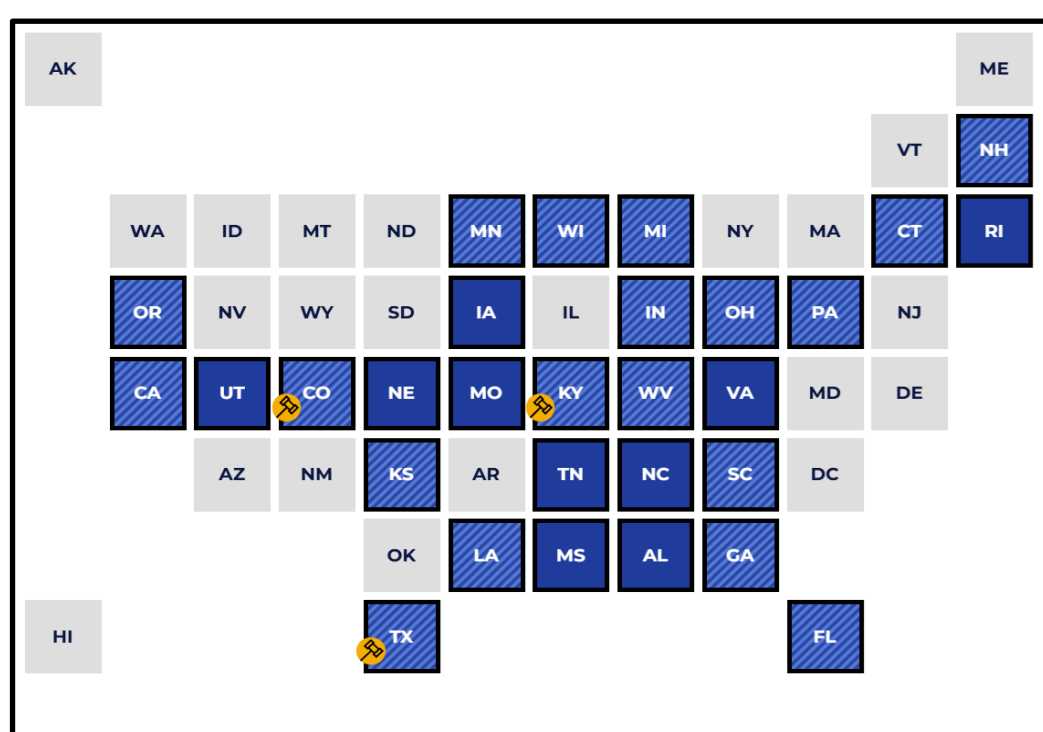
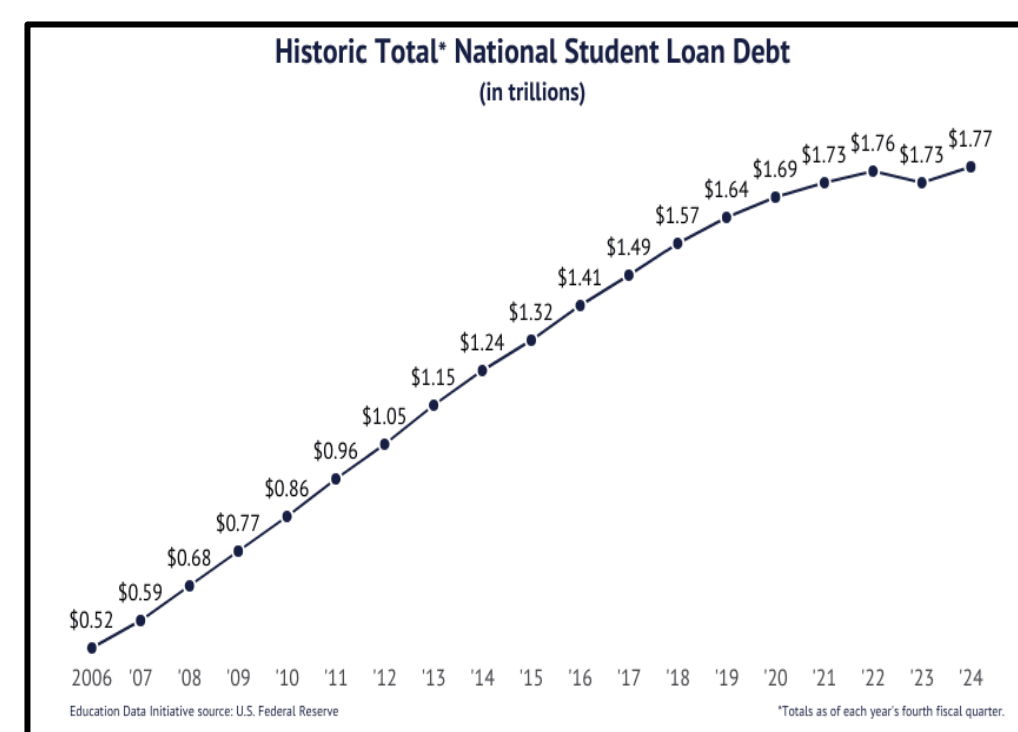
BACKGROUND

- Student loan debt has become one of the largest categories of consumer debt in the United States, surpassing both credit card and auto debt. **As of 2024, more than 43 million borrowers collectively owe over \$1.6 trillion in federal and private student loans.**
- Despite this growing financial burden, **many young borrowers enter into student loan agreements without a full understanding of key loan terms**, interest accrual, or the long-term financial consequences of their borrowing decisions.
- A *Student Voice* survey reported by *Inside Higher Ed* found that many students felt unprepared to make informed financial decisions when applying to and enrolling in college

"The thing about student loans is that it doesn't really matter to an 18-year-old kid how much it's going to cost, that's a problem for future you"

"It wasn't that I didn't understand I was paying back what I took out, it was that I massively underestimated how long it would take me to pay them back"

- There have been some efforts to address financial knowledge gaps at the high school level. **As of 2025, 29 states have made financial education a mandatory requirement for graduation.**



Source: Education Data Initiative, Student Loan Debt Statistics

Source: Next Gen Personal Finance

- An additional factor that may influence borrowers' understanding is parental education level. On a survey by Intuit, **83% of high schoolers stated relying on their parents for any financial knowledge.**
- According to the **Cultural capital model**, parents with higher levels of education may be better equipped to guide their children through complex financial decisions, including understanding student loans and repayment strategies.

RESEARCH OBJECTIVES

Understanding the knowledge gap surrounding student loan repayment among young borrowers is critical in the context of rising student debt levels in the United States.

This study aims to explore the following questions:

- Are students borrowing for higher education without fully understanding student loans and future repayment plans?
- Among the two primary sources of financial literacy for young borrower: high school financial education and parental educational attainment, how does each influence students' understanding of student loans?

HYPOTHESES

Hypothesis 1

- Receiving financial education in high school will be associated with
- Improved financial literacy as evidenced by The Big Five test
 - Better student loan repayment knowledge
 - Healthier loan related financial behaviors (Pre-loan monthly payment and future potential income assessment)

Hypothesis 2

- Parental/guardian college level or beyond education will be associated with
- Improved financial literacy as evidenced by The Big Five test
 - Better student loan repayment knowledge
 - Healthier loan related financial behaviors (Pre-loan monthly payment and future potential income assessment)

STUDY DESIGN: MIXED METHODS

Phase 1 National Financial Capability Study (2021 data set)

- Respondents that are currently between the ages of 18-24; currently have student loans for themselves; and either did not receive financial education OR received financial education in high school
- "Retrospective"**; provides information on young borrowers that **have already borrowed (prior to 2021)**

Phase 2 20 questions, multiple choice, online survey-based study designed by the researcher

- Current high school seniors who anticipate applying for a student loan within the next 12 months
- "Prospective"**; provides insights into financial knowledge on **future student loan borrowers**; contributes more recent data (compared to the latest available 2021 NFCS data) and sheds light on the potential effects of **increased financial literacy education among high school**

METHODS

DATA COLLECTION

- NFCS questionnaire data, 2021
 - (QA3, QA41, QG30, QM20, QM21_1, QM6, QM7, QM8, QM9, Q10, QG33)
- Researcher led survey-based quiz

SCORE CALCULATION

- Removal of invalid or incomplete responses for each variable
 - Binary Categorization of Dependent and Independent Variables
 - (Excluding Individual Objective quiz Scores)

BINARY CATEGORIZATION

- Removal of invalid or incomplete responses for each variable
 - Binary Categorization of Dependent and Independent Variables
 - (Excluding Individual Objective quiz Scores)

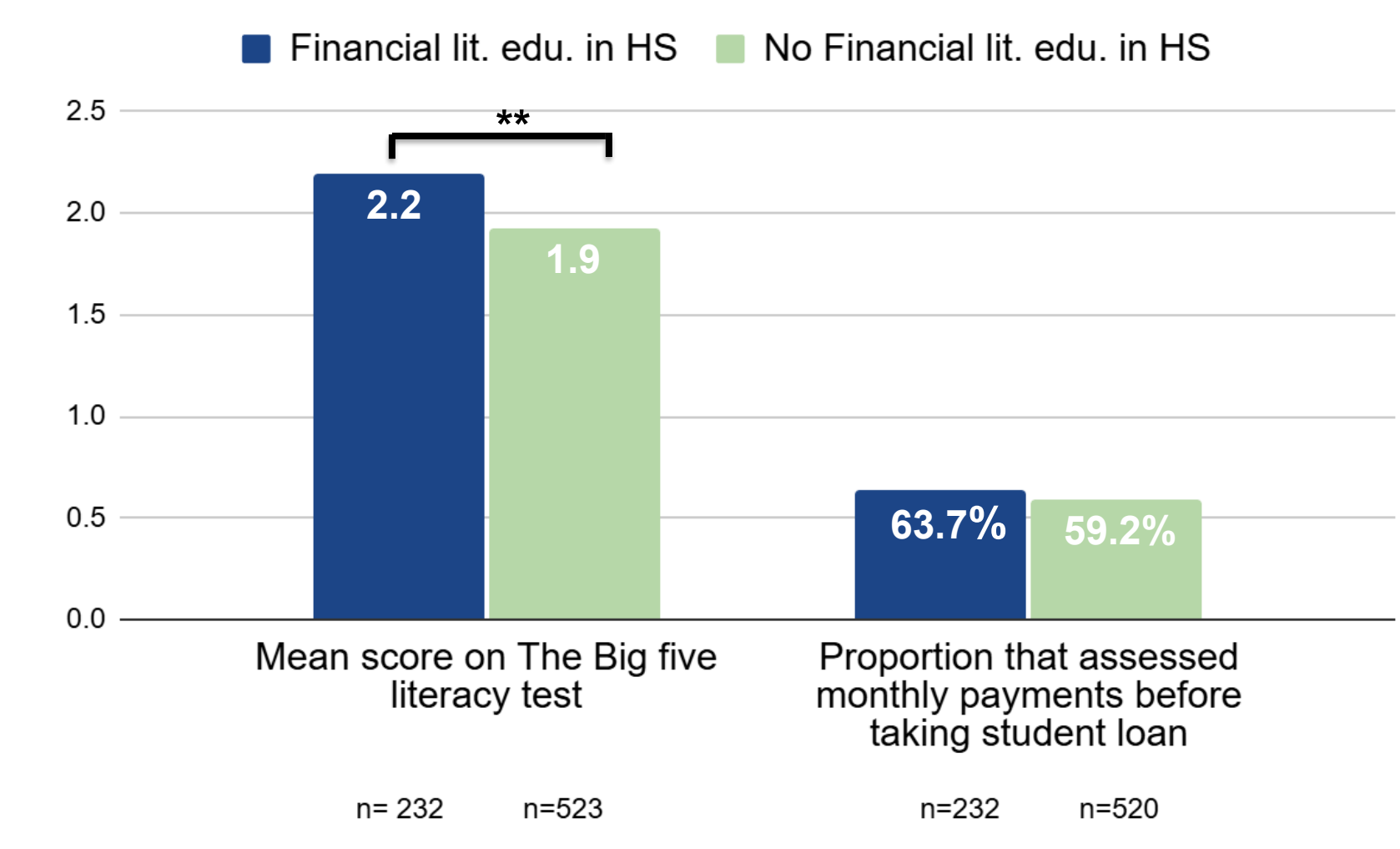
STATISTICAL ANALYSIS

- Welch's t test
- Two Proportion Z-test

RESULTS

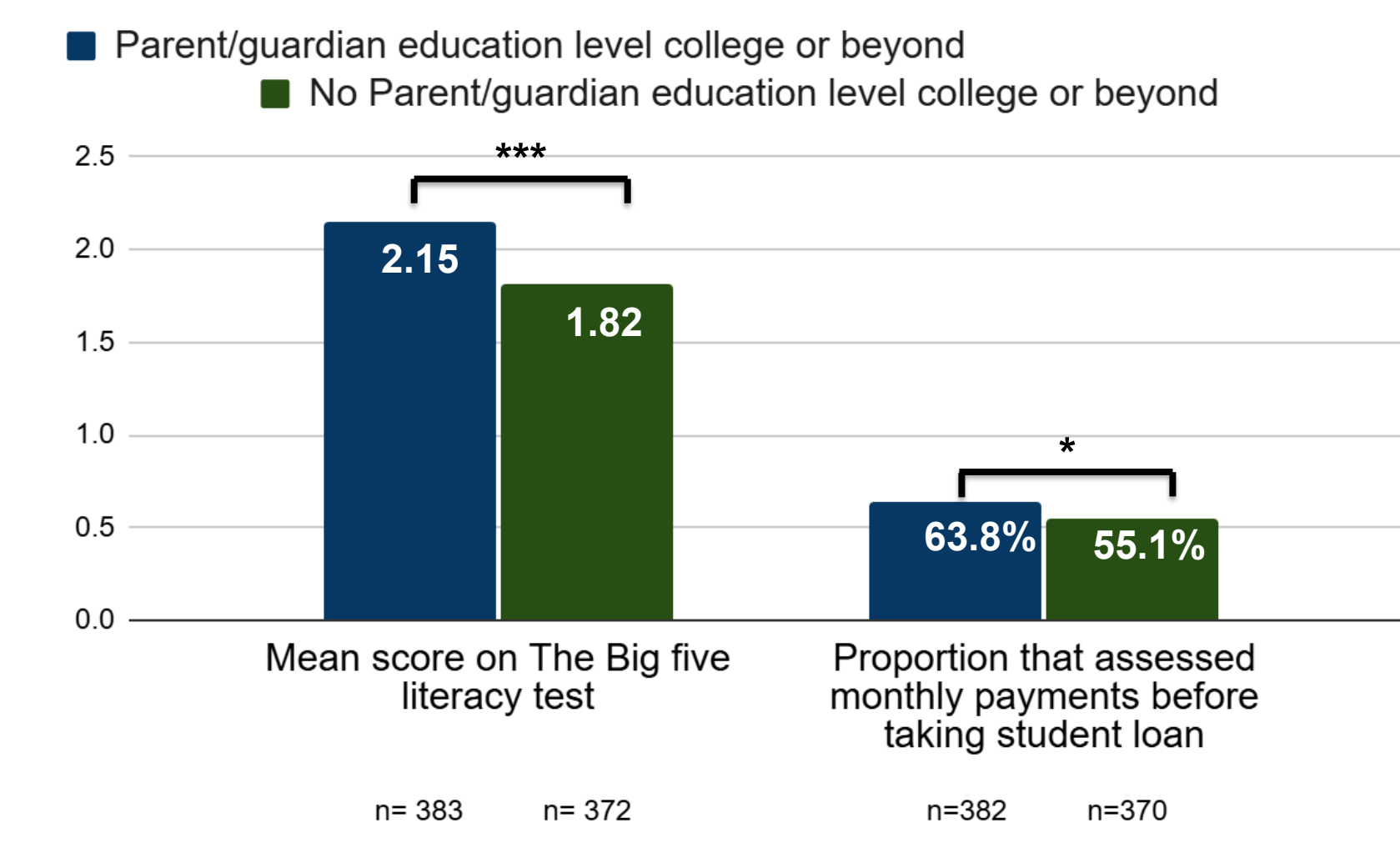
PHASE 1: NFCS (2021) DATA

FINANCIAL LITERACY EDUCATION IN HIGH SCHOOL



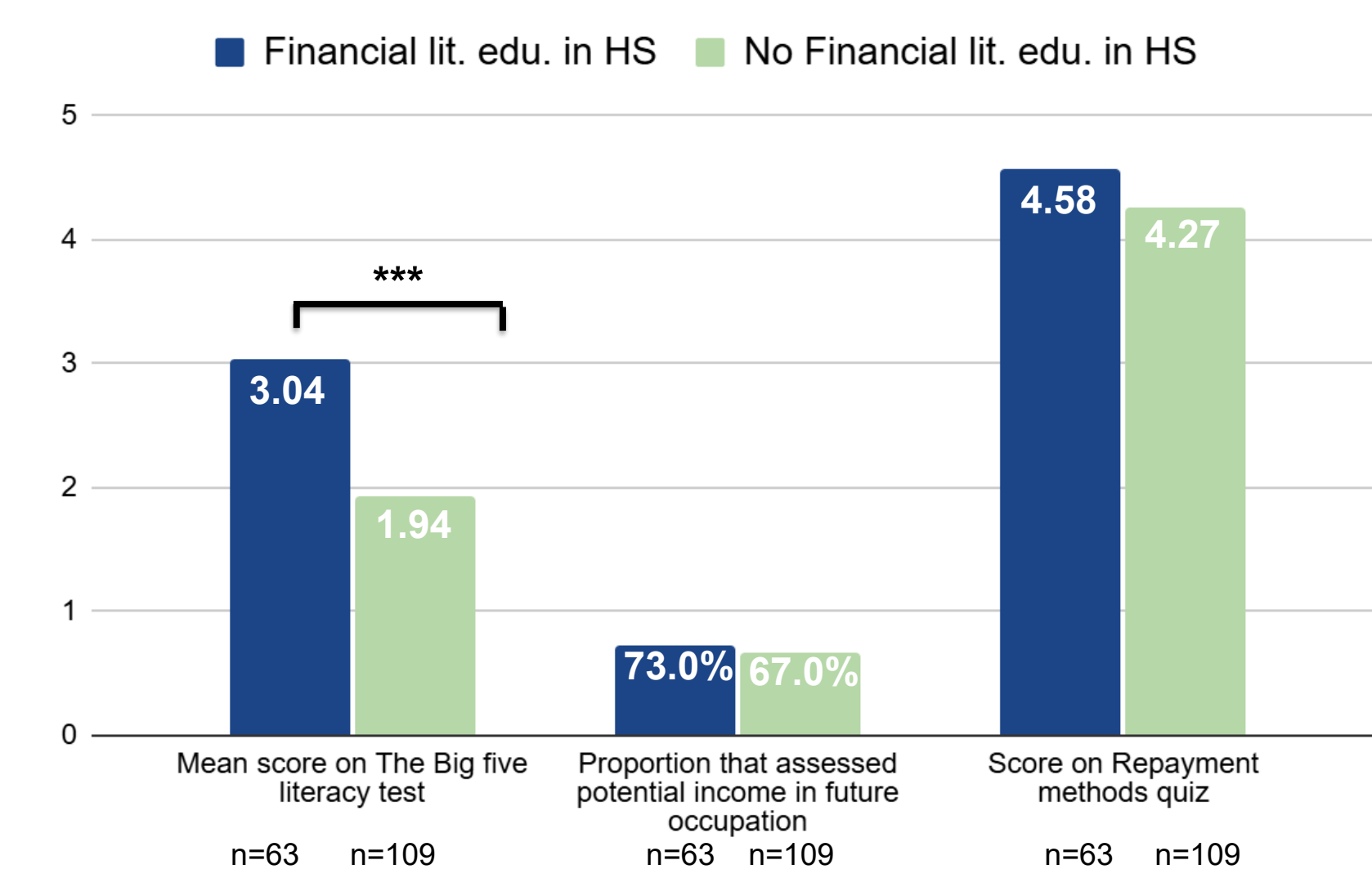
**Welch's t- test: $t(423)=2.45, p=0.0074$ (one tailed)
Two proportion Z- test, $z=1.18, p=0.12$ (one tailed)

PARENTAL/GUARDIAN COLLEGE LEVEL OR BEYOND EDUCATION ATTAINMENT

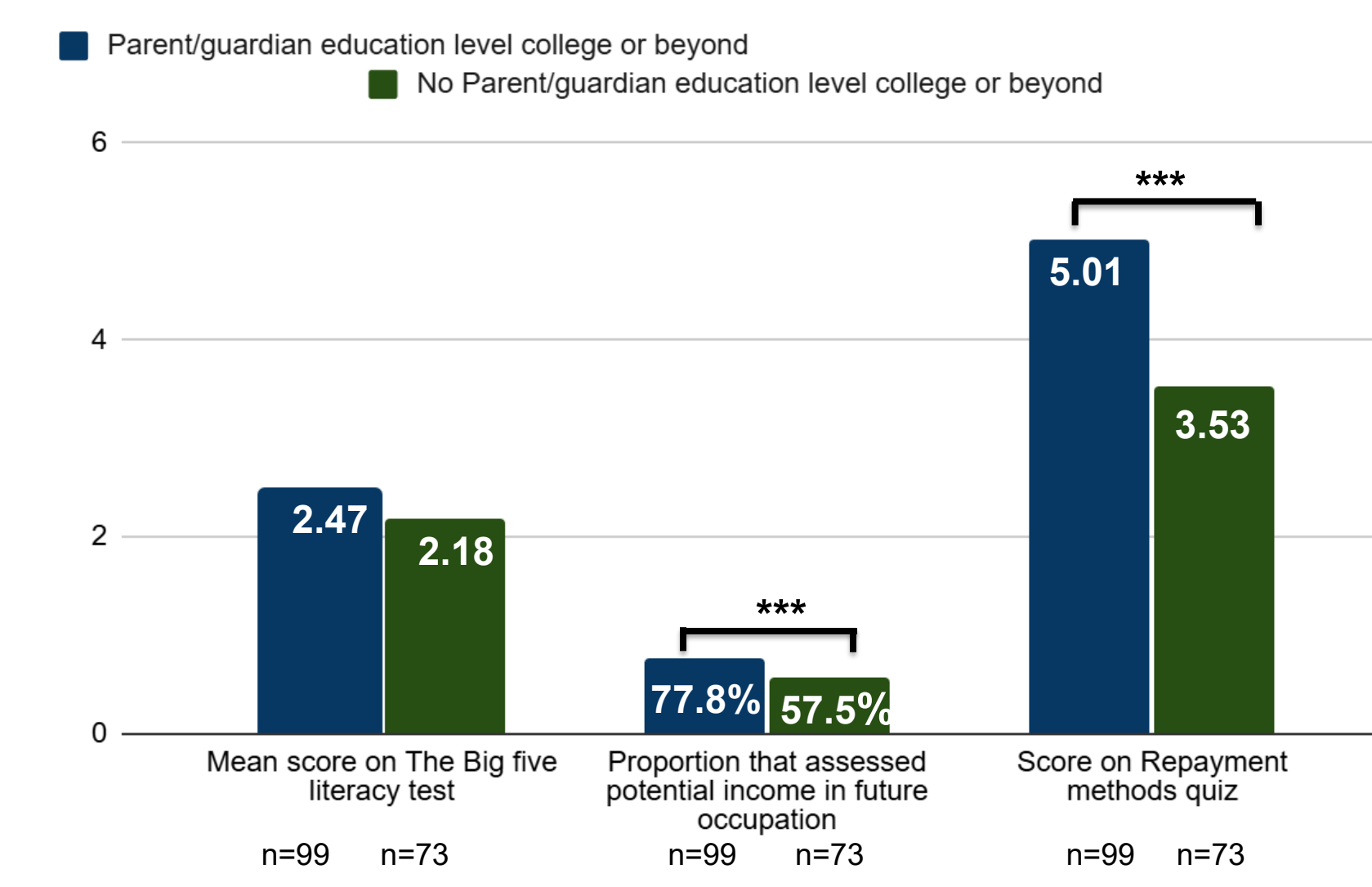


***Welch's t- test: $t(753)=3.311, p<0.001$ (one tailed)
*Two proportion Z- test, $z=1.84, p=0.032$ (one tailed)

PHASE 2: SURVEY DATA (CURRENT SENIORS)



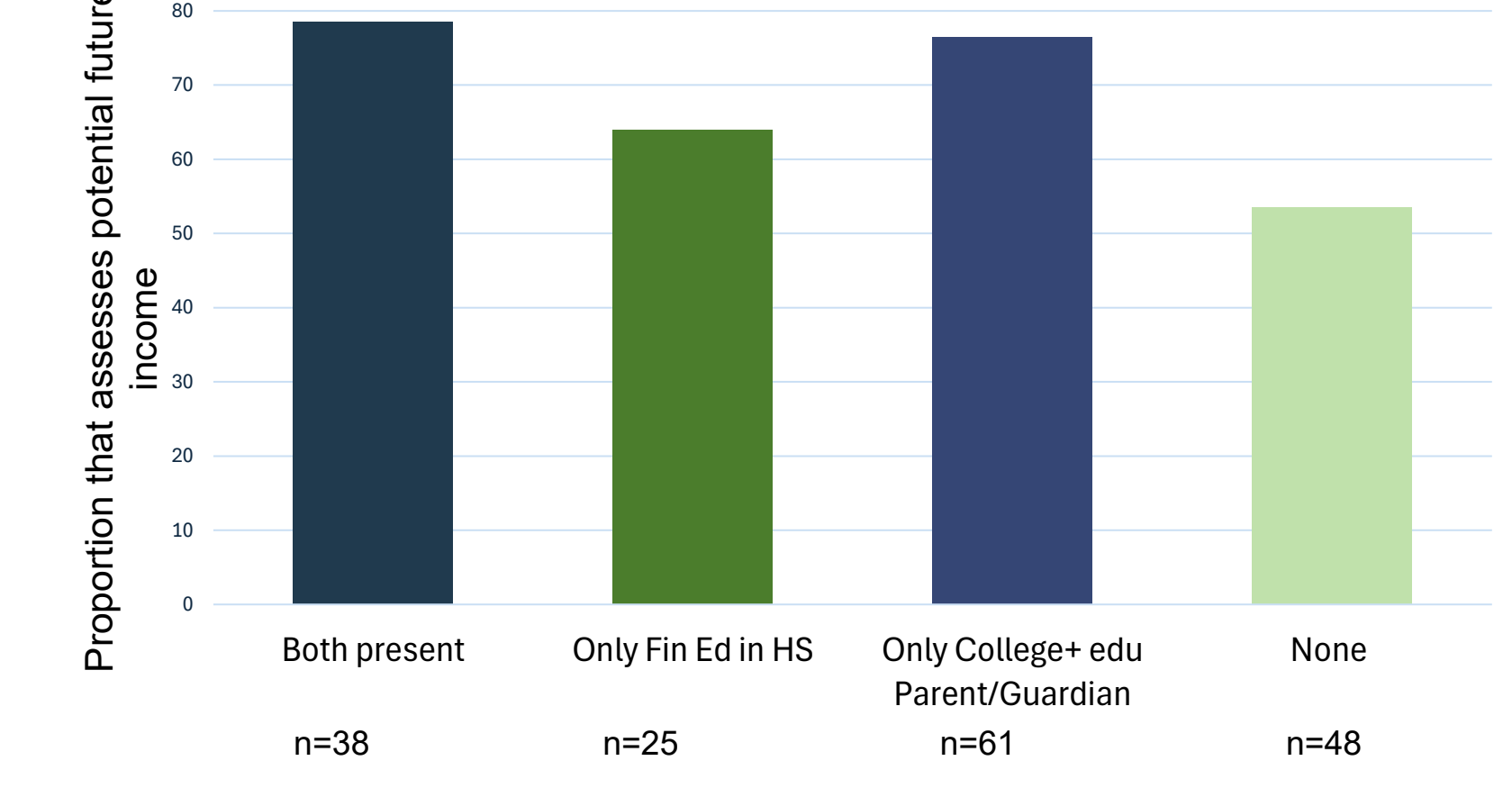
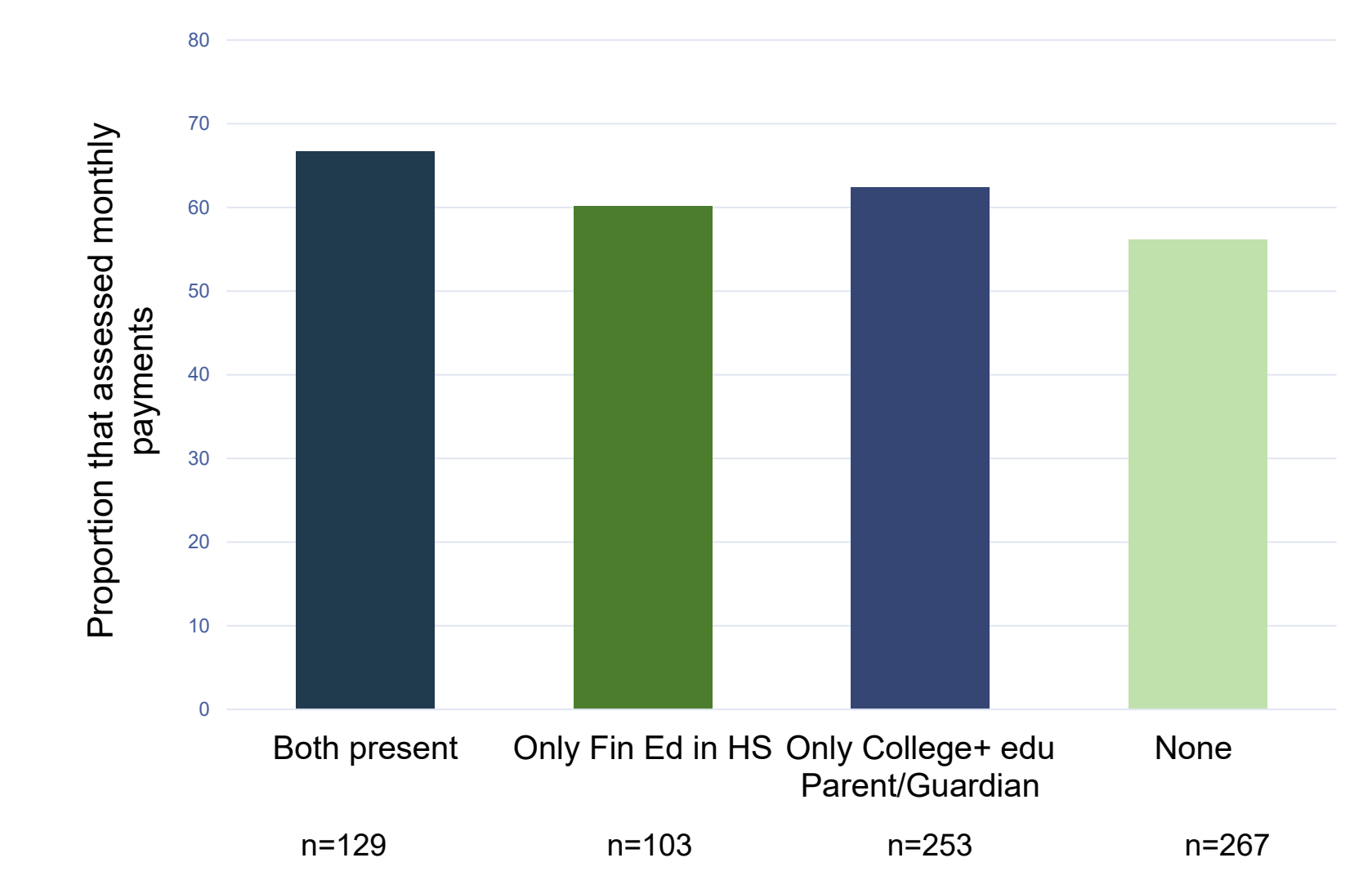
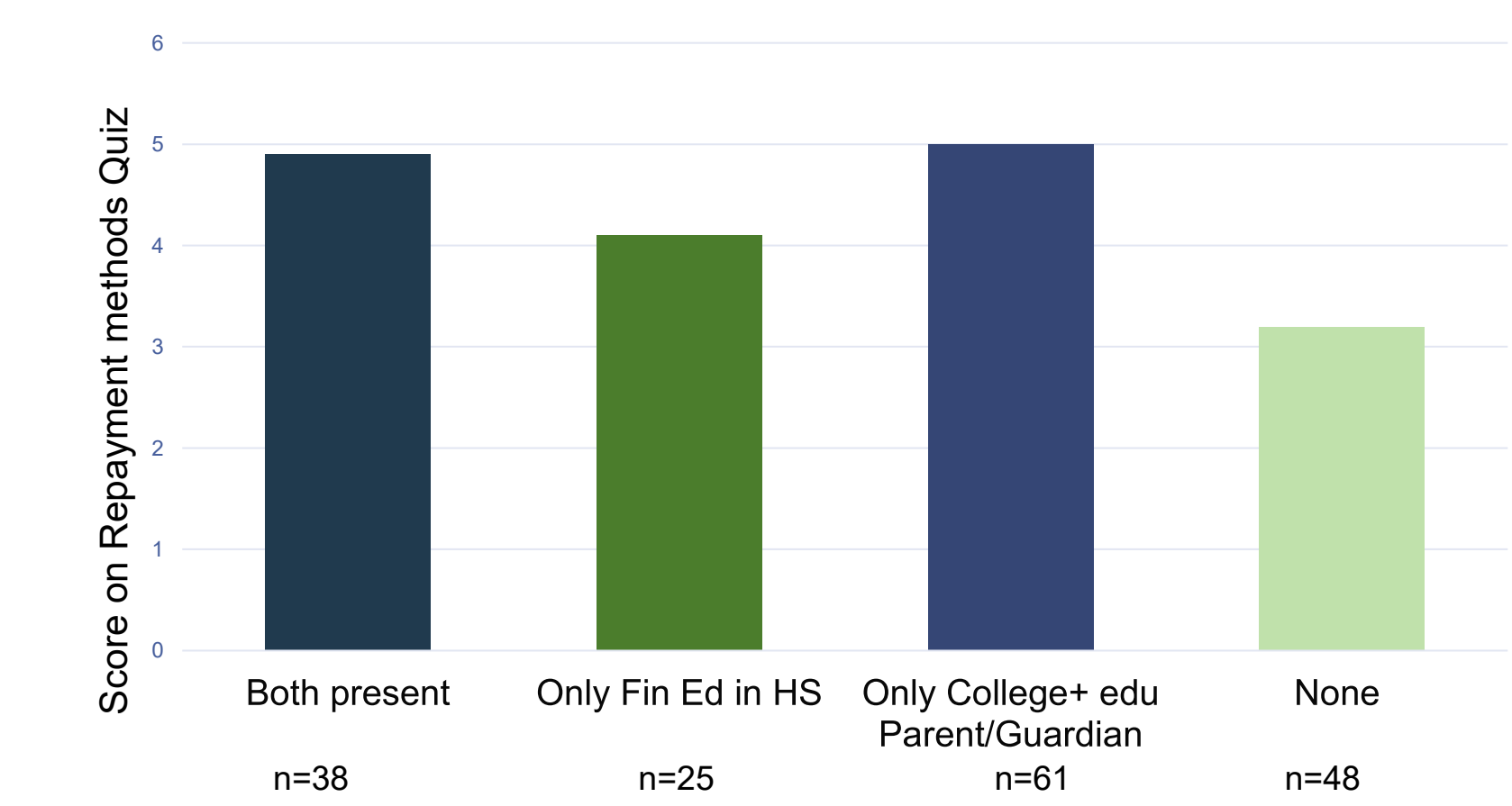
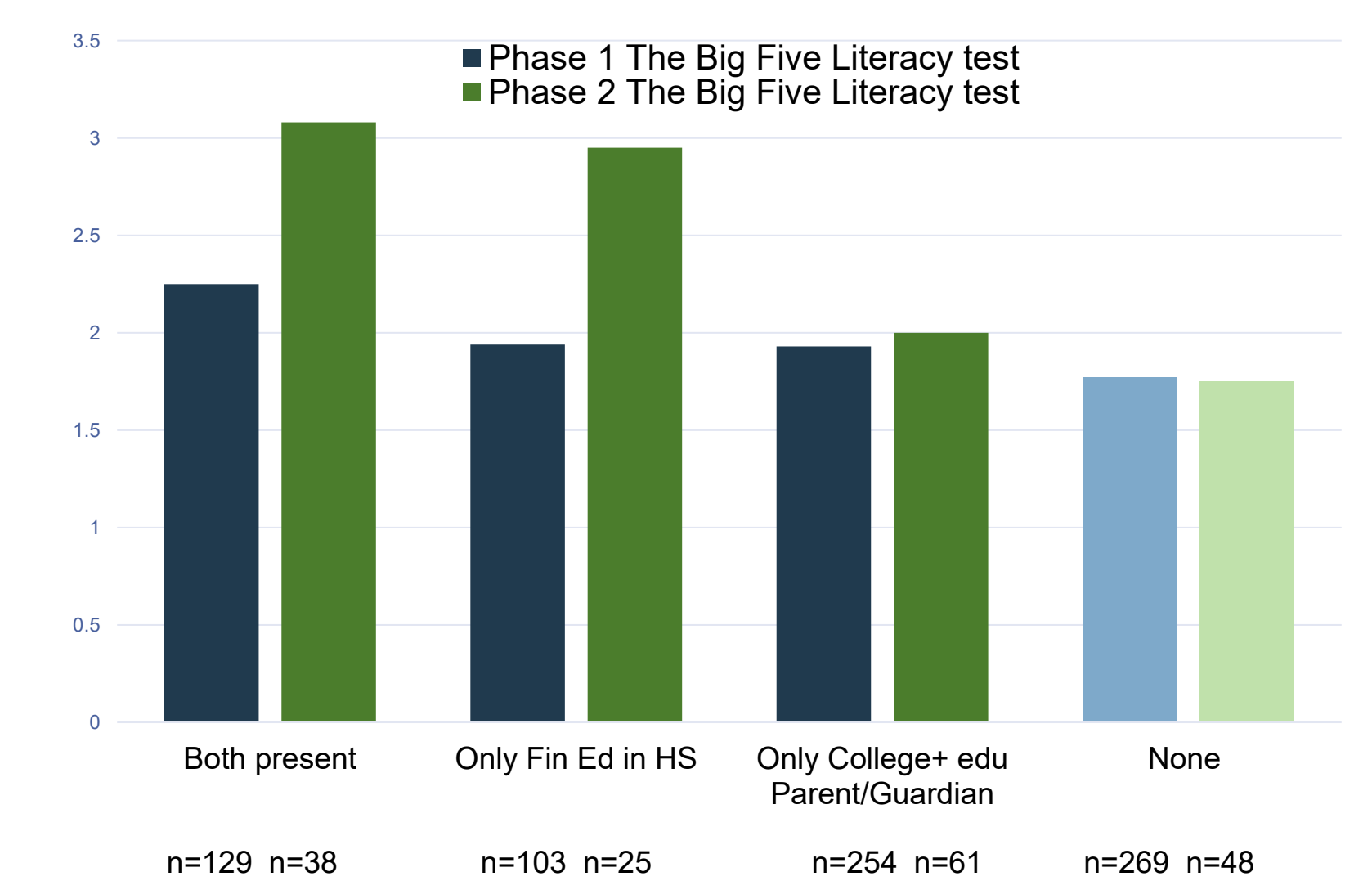
***Welch's t- test: $t(108)=7.18, p<0.001$ (one tailed); Two proportion Z- test, $z=0.82, p=0.20$ (one tailed)
Welch's t- test: $t(151)=1.45, p=0.07$ (one tailed)



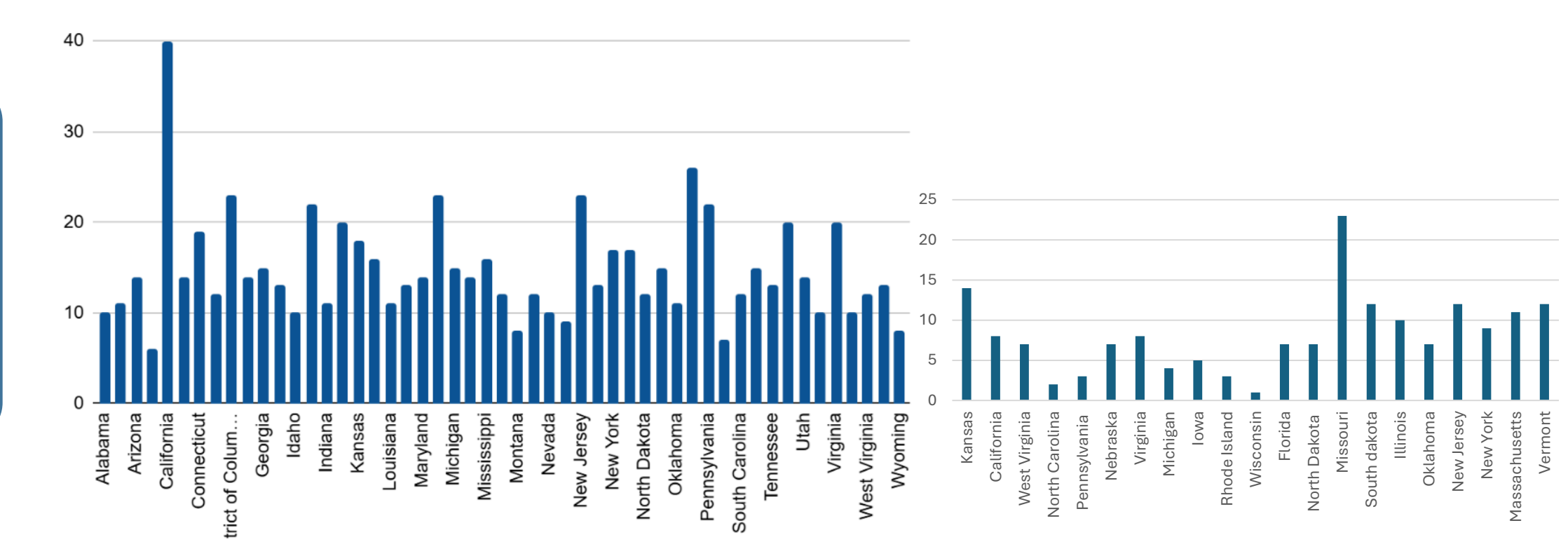
Welch's t- test: $t(154)=1.63, p=0.053$ (one tailed); Two proportion Z- test, $z=3.38, p=0.0004$ (one tailed)
***Welch's t- test: $t(170)=8.12, p<0.0001$ (one tailed);

GROUP ANALYSIS

Worst Measures in group that did not receive financial education or have a college level or beyond educated parent/guardian



DISCUSSION



Statewide distributions of data obtained from NFCS(2021) and survey

FINANCIAL LITERACY EDUCATION IN HIGH SCHOOL

Improved	Did not improve
<ul style="list-style-type: none"> Performance on the Big 5 financial literacy test 	<ul style="list-style-type: none"> Likelihood of evaluating monthly loan payments before borrowing
<p>Phase 2</p> <ul style="list-style-type: none"> Performance on the Big 5 financial literacy test 	<p>Phase 2</p> <ul style="list-style-type: none"> Scores on a student loan repayment options quiz Likelihood of assessing potential income for future occupation

COLLEGE LEVEL OR BEYOND PARENTAL/GUARDIAN EDUCATION

Improved	Did not improve
<ul style="list-style-type: none"> Likelihood of evaluating monthly loan payments before borrowing. Performance on the Big 5 financial literacy test 	<ul style="list-style-type: none"> Performance on the Big 5 financial literacy test
<p>Phase 2</p> <ul style="list-style-type: none"> Scores on a student loan repayment options quiz Likelihood of assessing potential income for future occupation 	<p>Phase 2</p> <ul style="list-style-type: none"> Performance on the Big 5 financial literacy test

GROUP ANALYSIS

Absence of both support measures (financial literacy and college educated parent/guardian): **Worst outcomes across all measures**

IMPLICATIONS

To support informed borrowing among young borrowers:

- Increased access to **high school financial literacy programs across all states** is needed
- Financial literacy education should include **dedicated content on student loans**, especially as students are making real-time borrowing decisions
- Access to financial literacy education and student loan knowledge, especially in schools serving **first-generation college students**, is needed
- Support students without college-educated parents with additional guidance and resources

FUTURE STUDY

- Longitudinal study of current high school seniors to evaluate post graduation loan related behaviors
- Consideration of other potential variables including socio-economic status

LIMITATIONS

- Possible variables not considered include: Access to financial resources or advisors, Prior exposure to loan information from other sources, Socio-economic background and current year in college for adults in NFCS survey.
- Additionally, limitations of online surveys are self-selection bias and sampling bias

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