

The Effects of Compensation Structure on Consumption Behavior

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Abstract

To cope with persistently high inflation and economic uncertainty, an increasing number of Americans have sought out supplemental work to help make ends meet.

In two pre-registered studies, we examine the consumption behavior of individuals with multiple sources of income. In Study 1, we investigate the types of purchases individuals make with primary versus supplementary income. In Study 2, we explore how the concentration of primary income influences overall consumption behavior, as well as necessities/indulgences spending.

Motivation

Today, it is increasingly common for individuals to earn income through supplementary sources:

- 58 million Americans — roughly 1/3 of the employed US workforce — are engaged in gig work¹
- 32 million Americans use gig work to supplement their primary income^{1,2}
- Over 25% of gig workers put the money earned towards supporting their basic needs¹

Study 1

RESEARCH QUESTION

Do individuals spend their primary and supplementary income differently?

METHODS

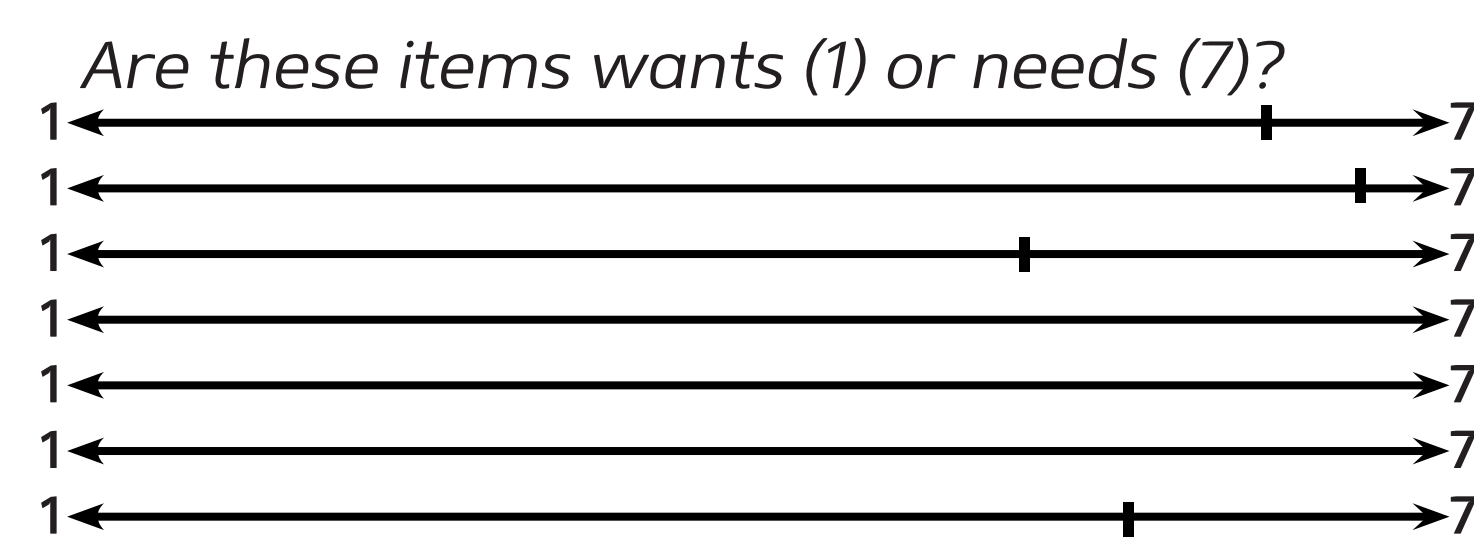
Prolific: N = 745 (M_{age} = 36.91, SD_{age} = 13.03, 54.6% Female)

• Representative of the national US income distribution

Participants were asked:

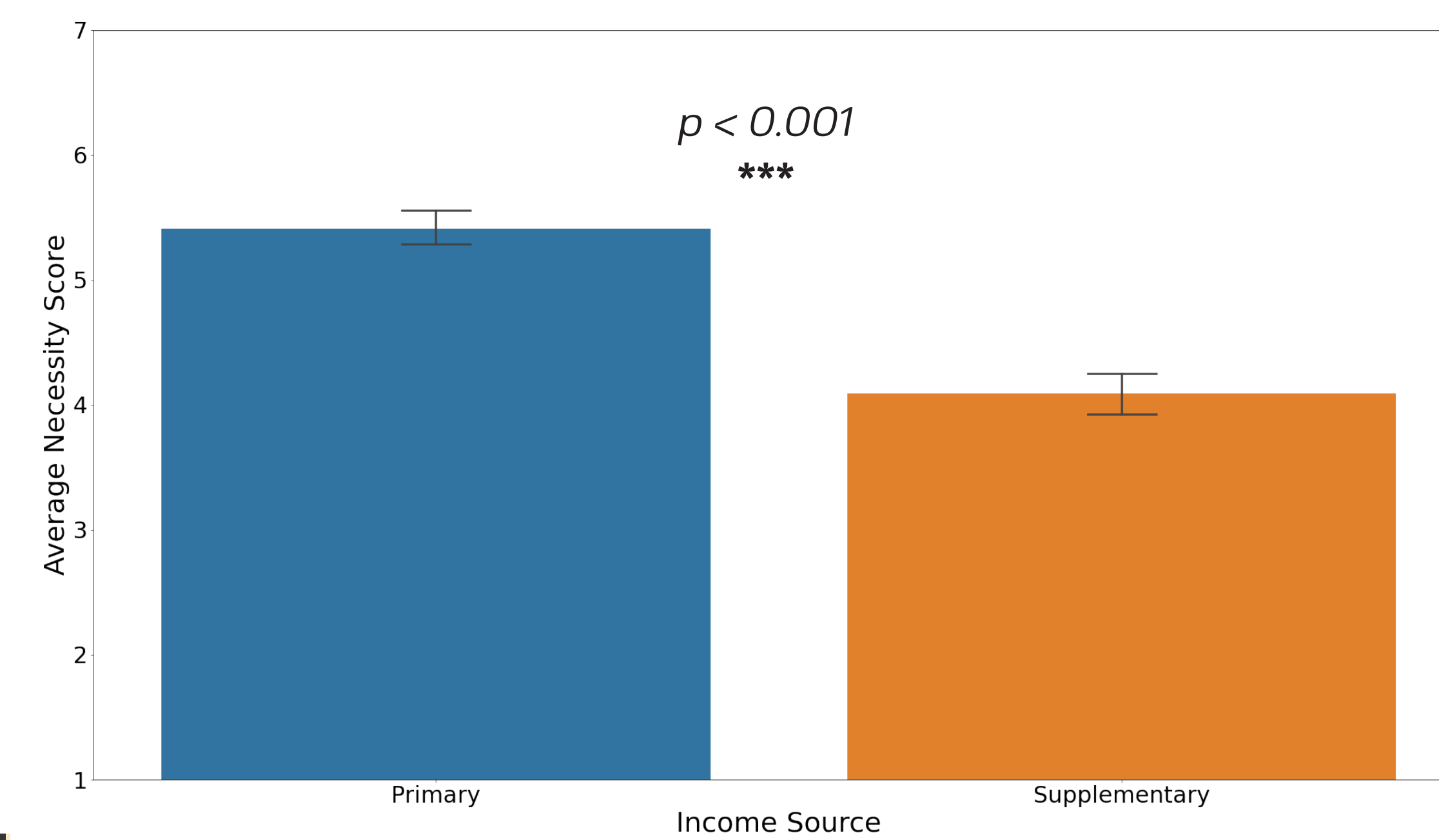
- What are the top ways you earn income?
- What % of your income is earned through this source?
- What do you pay for using this source of income? Check all that apply. [30 categories incl. Groceries, Utilities, Eating Out, etc.]
- When you make purchases in [this category] with [selected income source], are these items wants (1) or needs (7)?

- Groceries
- Utilities
- Clothing
- Eating Out
- Event Tickets
- Transportation

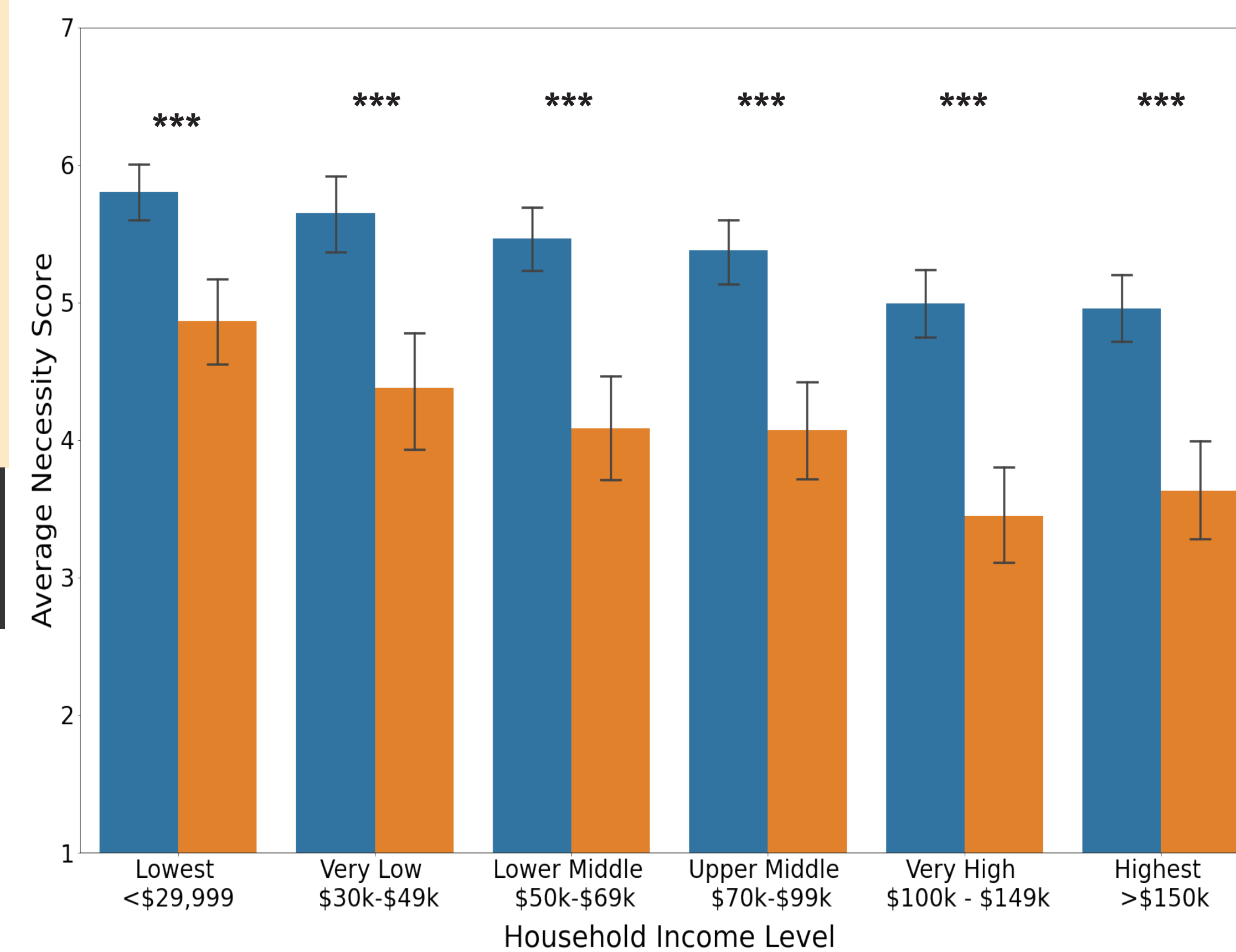


RESULTS

Individuals report higher necessity scores for the purchases they make with their primary incomes and lower necessity scores for the purchases they make with their supplementary incomes.



This effect holds within and across income levels



A two-way ANOVA revealed a statistically significant effect of income source ($p < .001$), income level ($p < .001$), but not their interaction. ($F =$, $p < .001$). Post-hoc multiple comparisons performed using Tukey's HSD test.

DISCUSSION

- For people with multiple income sources, there are meaningful differences in how they think about spending primary versus supplementary income.
- Participants report spending their primary income on relative necessities and the supplementary income on relative indulgences.

Study 2

RESEARCH QUESTION

How does compensation structure affect overall consumption behavior?

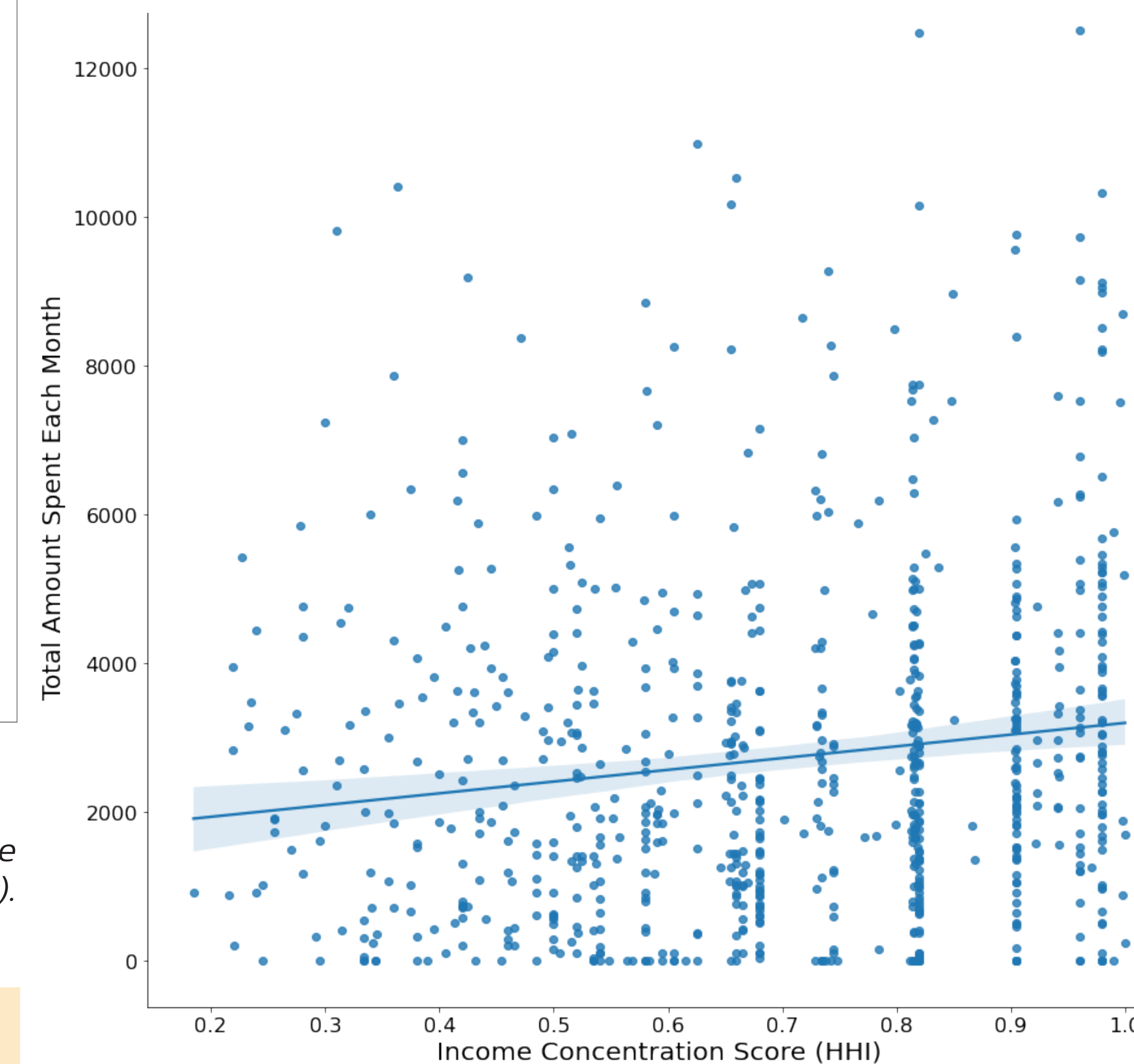
METHODS

Prolific: N = 737 (M_{age} = 38.96, SD_{age} = 13.18, 42.8% Female)

- Participants were prescreened and balanced across income concentration and US household income bracket levels
- Participants were asked to report the amount of money spent across the 30 expenditure categories used in Study 1 over the last 30 days.
- Participants were encouraged to consult bank statements, credit card records, etc.
- Compensated \$4 for estimated 15 minutes of work

RESULTS

Higher income concentration is associated with increasing spending, controlling for overall income levels

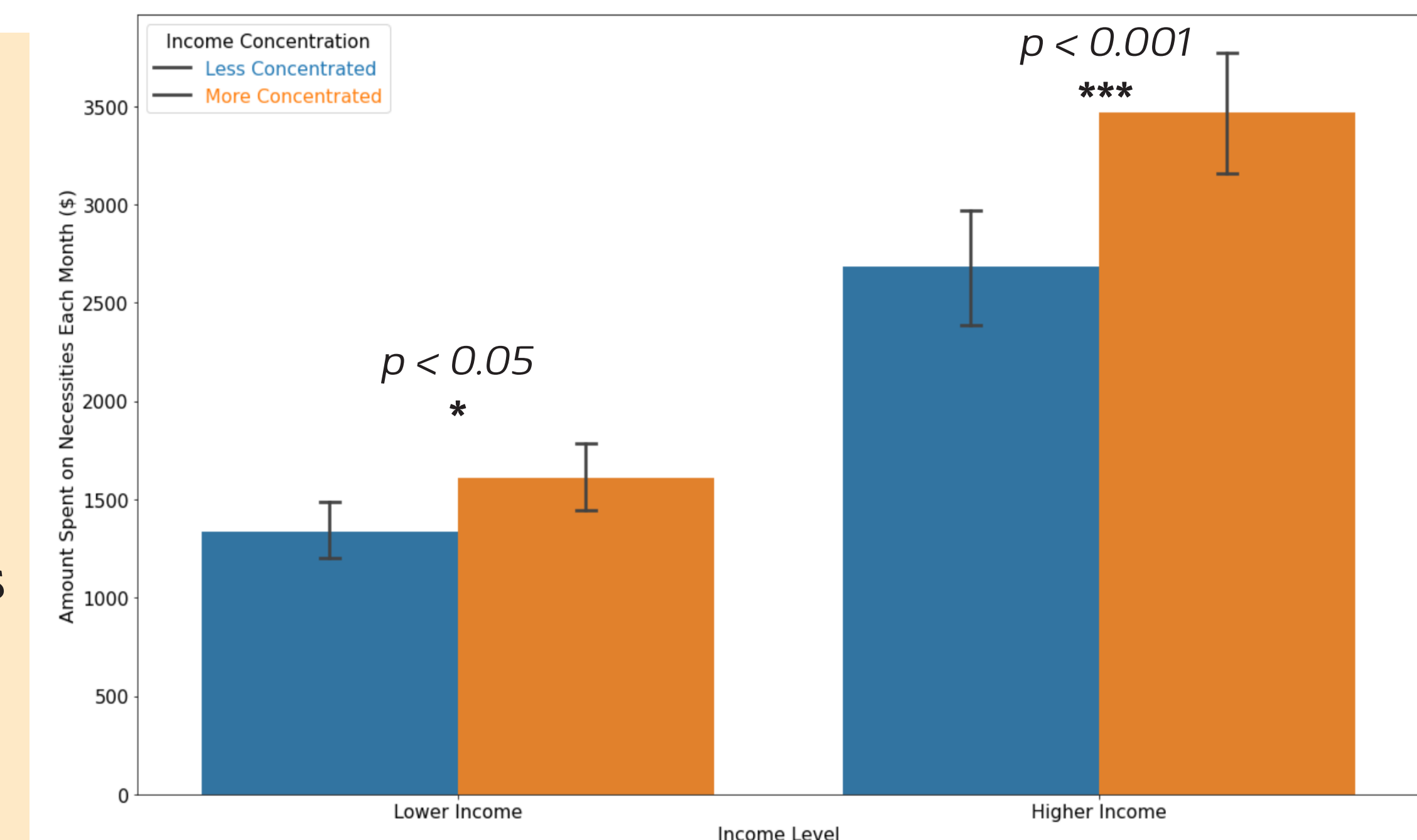


	Dependent variable: Total Amount Spent (1)
Income Concentration (HHI)	1515.9*** (424.4)
ln(Household Income)	1735.5*** (115.0)
Constant	-17210.0*** (1287.7)
Observations	737
R ²	0.255

Note: *p<0.05; **p<0.01; ***p<0.001

RESULTS

More concentrated primary income is associated with increased necessities spending for both above and below median income levels



Controlling for overall income level, having more concentrated primary income is associated with, on average, a \$270 increase in necessities spending (20% increase) for lower income individuals and a \$785 increase in necessities spending (30%) for higher income individuals.

DISCUSSION

- Our results suggest that the composition of income meaningfully influences spending behavior
- Individuals with less concentrated income allocate a smaller share of income to necessities
- This would suggest that individuals with multiple sources of income may need to earn even more than an individual with a single income source to make ends meet

Next Steps

- We are in the process of extending these findings to the field using observational data
- We are partnering with a large national bank to acquire transaction-level data from customers across all of their financial activities
- This will allow us to investigate whether these reported relationships between compensation structure and spending align with actual spending behavior

References

- [1] Freelance work, side hustles, and the gig economy | McKinsey. (n.d.).
 [2] Independent work: Choice, necessity, and the gig economy | McKinsey. (n.d.).
 [3] Anderson, M. et al. (2021) 'The State of Gig Work in 2021', Pew Research Center: Internet, Science & Tech, 8 December.

