

Multiple Price List Underestimates Consumer Valuation and Demand

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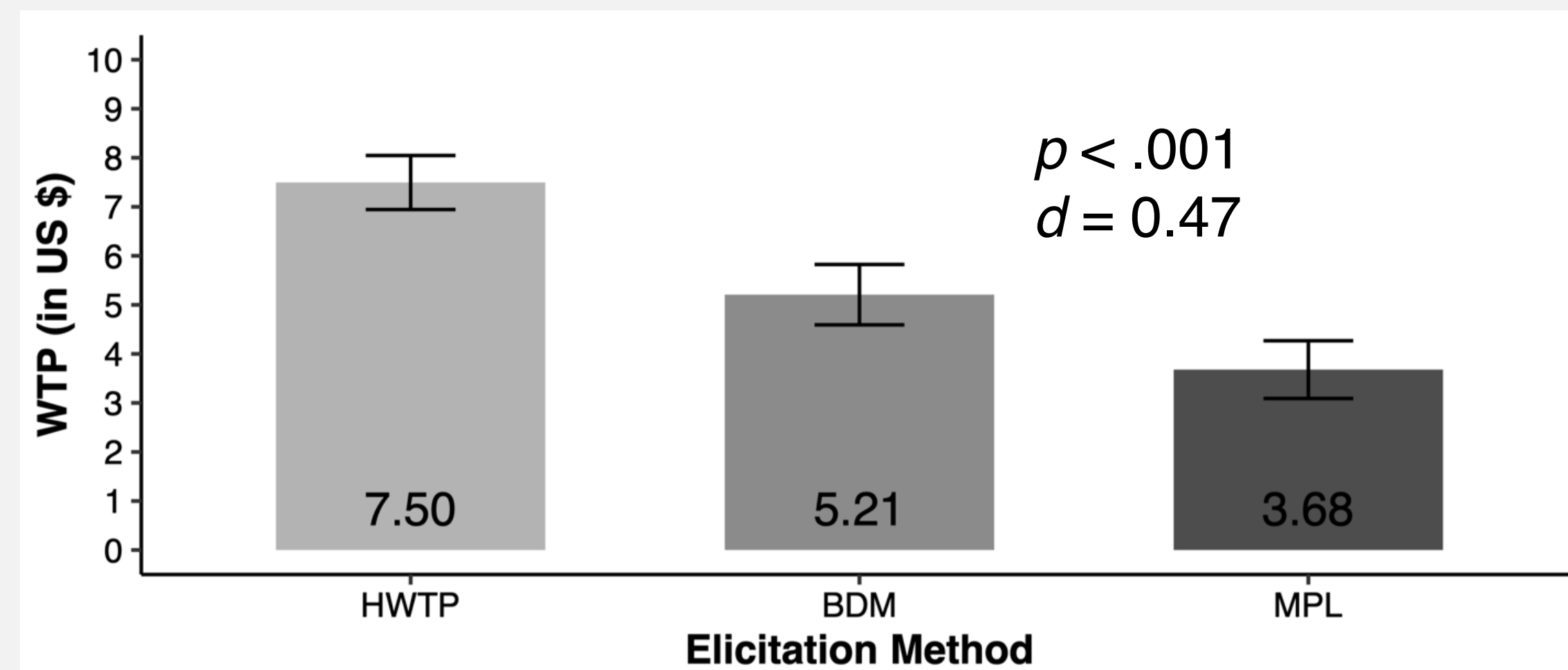


Background

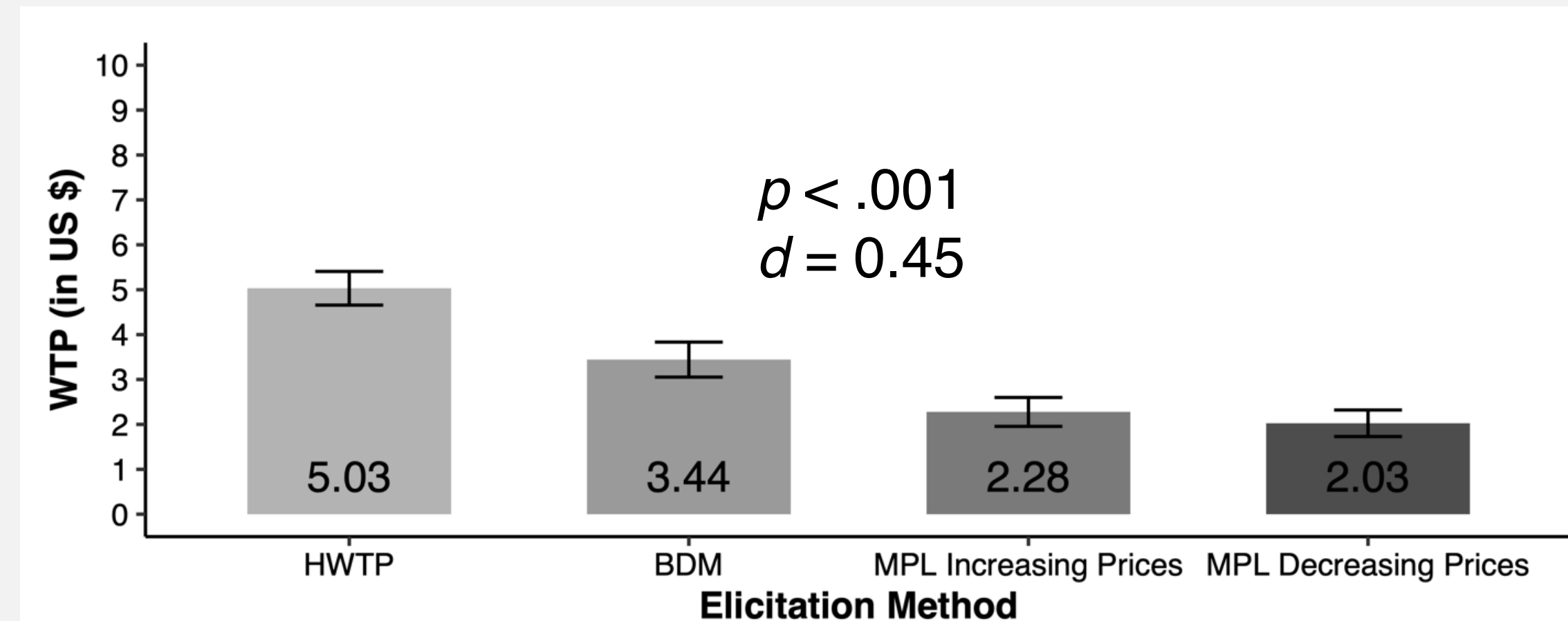
- Multiple Price List^{1,2} is an increasingly popular method for eliciting preferences.
- It remains unclear whether preferences elicited under MPL are comparable to those elicited under theoretically equivalent methods such as the Becker–DeGroot–Marschak method.³

Studies 1 & 2: WTP for a movie is lower when elicited using MPL (vs. BDM)

Design. University students (Study 1, $N = 340$) and MTurk workers (Study 2, $N = 1,215$) were assigned to between-subjects conditions and indicated their WTP for a preferred movie.



Results of Study 1. HWTP = Hypothetical Willingness-to-Pay



Results of Study 2.

Studies 3 & 4 (N = 800): MPL-BDM difference is robust across products and price ranges

Product	BDM	MPL	Difference
12-piece chocolate gift box	\$20.69	\$12.42	$p < .001, d = 0.75$
30-minute massage	\$59.70	\$40.42	$p < .001, d = 0.47$
2-hour cleaning service	\$98.60	\$56.44	$p < .001, d = 0.80$
\$20 Amazon gift card	\$17.77	\$15.42	$p < .001, d = 0.39$
Vacuum cleaner	\$78.74	\$55.58	$p < .001, d = 0.57$

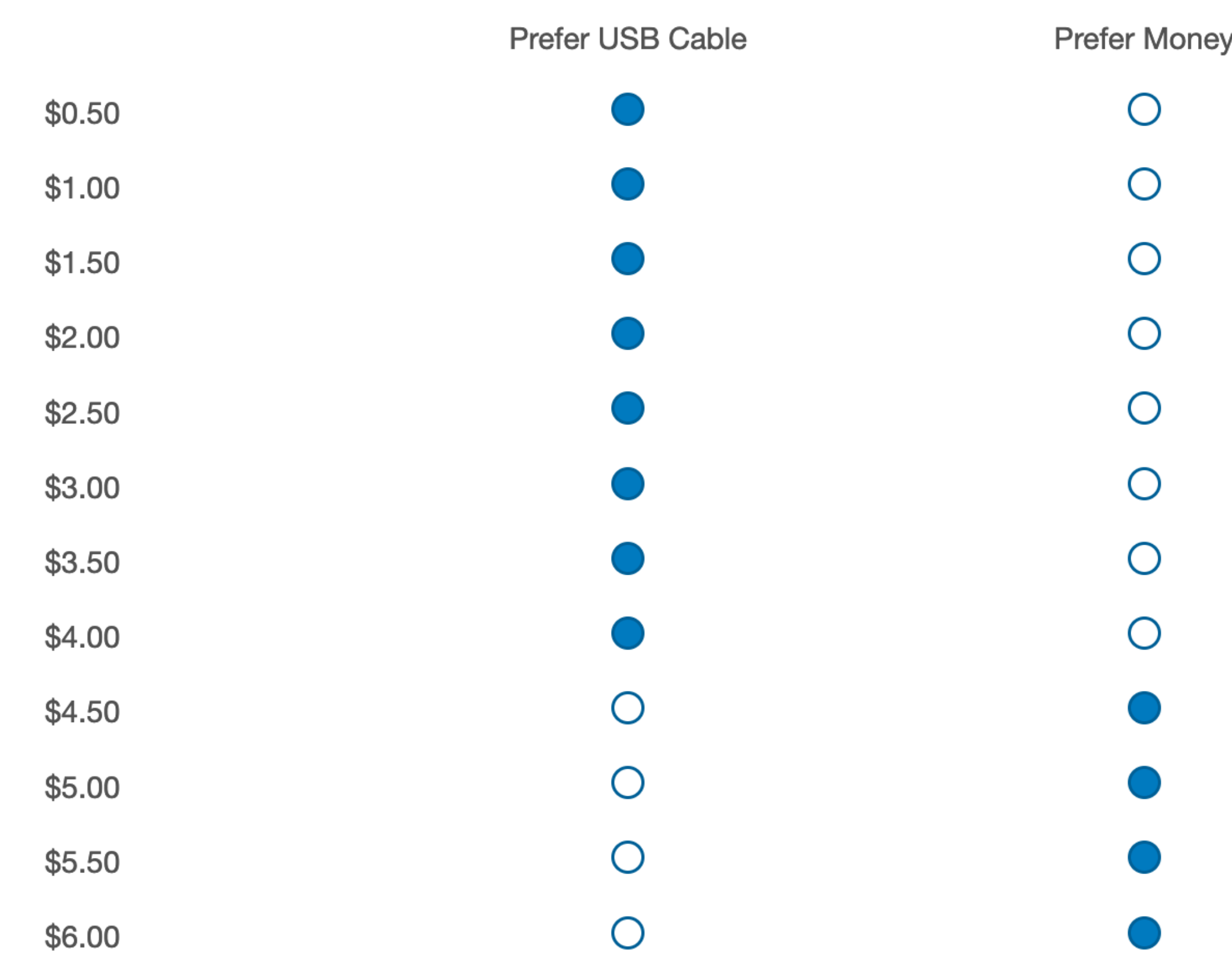
Main Findings

- MPL lowers willingness-to-pay significantly.
- MPL underestimates market demand.
- MPL could cause a floor effect in valuation, making it harder for researchers to find real effects.



Amazon Basics USB-A to Lightning Cable, 6 Feet

What is the highest amount of money (in US dollars) you would be willing to pay for this USB cable? Please indicate whether you would "Prefer USB Cable" or "Prefer Money", for each of the following amounts of money.



Example of Multiple Price List

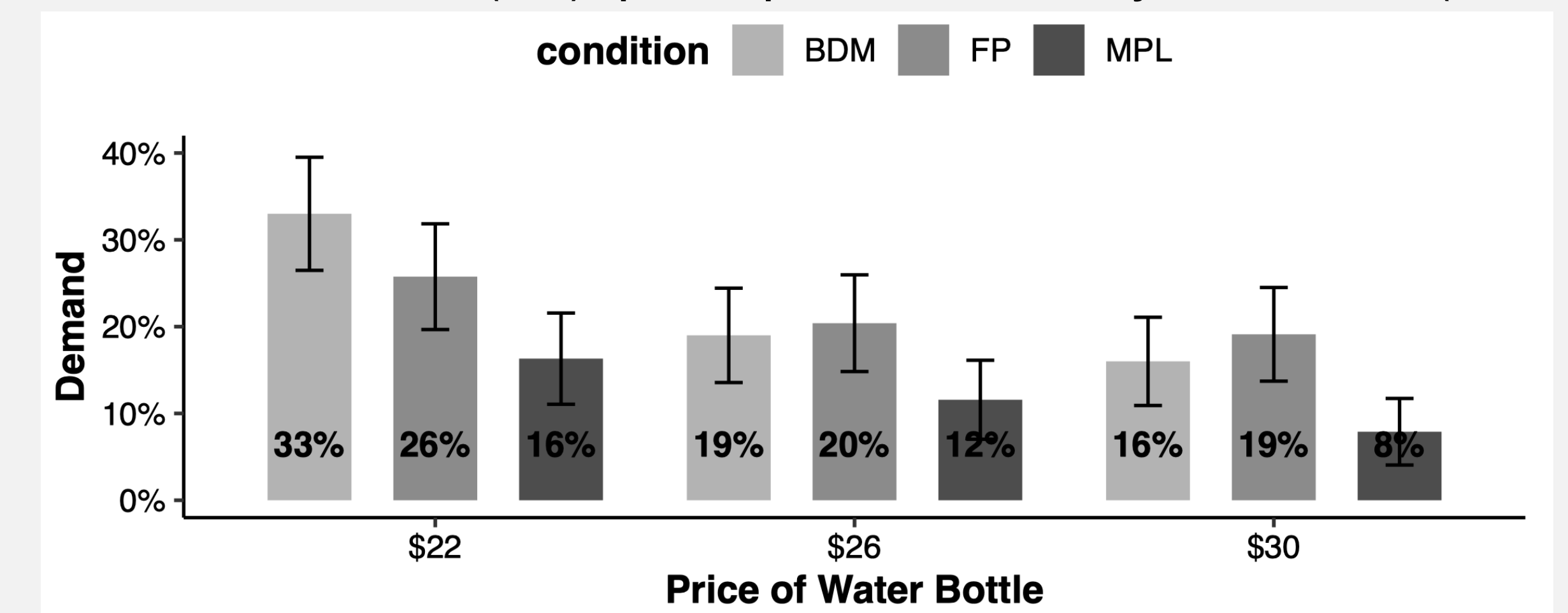
Studies 5 & 6 (N = 1,305): MPL-BDM difference is robust across design features of MPL

MPL-BDM difference exists, whether:

- "Prefer Money" is on the right side or the left side;
- Price increments are \$0.05, \$0.25, \$0.50, or \$1.00;
- Participants have to click to make a decision for each price, or only click on the two prices bracketing the switching price.

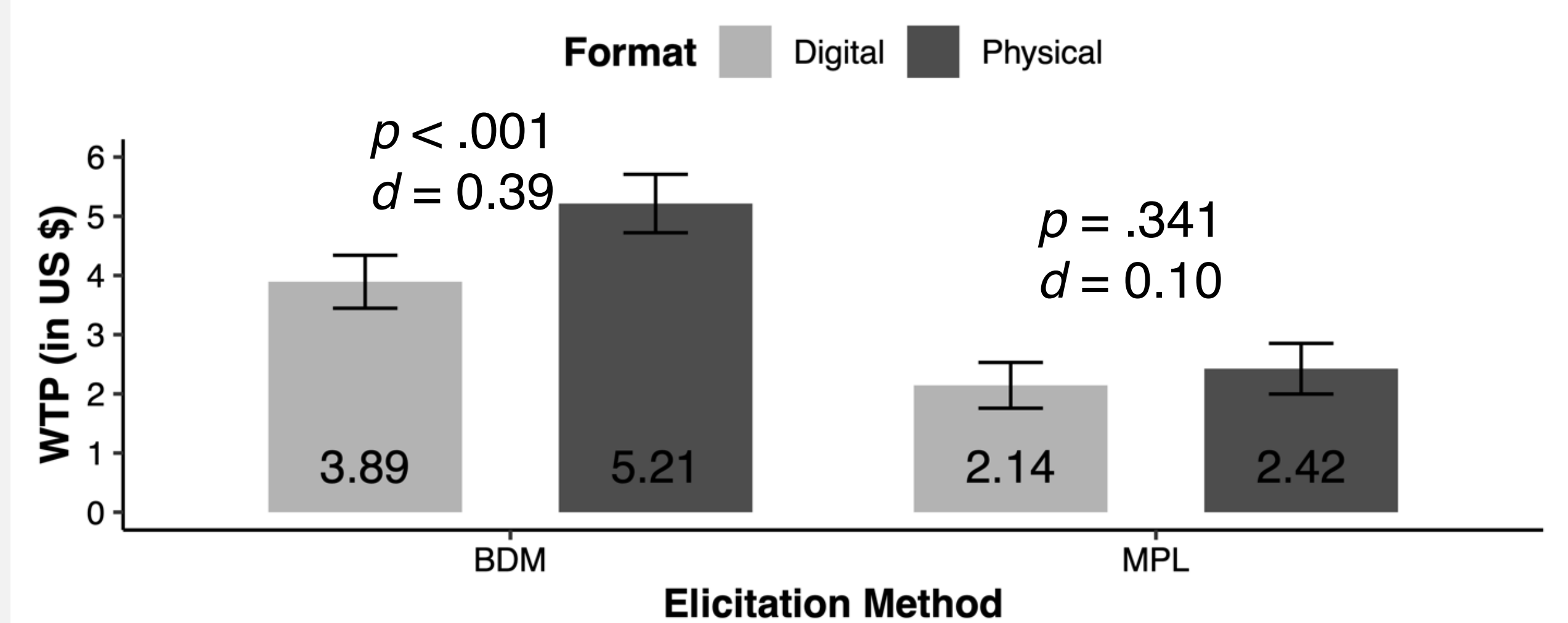
Studies 7 & 8 (N = 1,592): MPL underestimates market demand

Choice at Fixed Price (FP): participants make only 1 decision (Yes/No)



Study 9 (N = 801): MPL obscures real effects

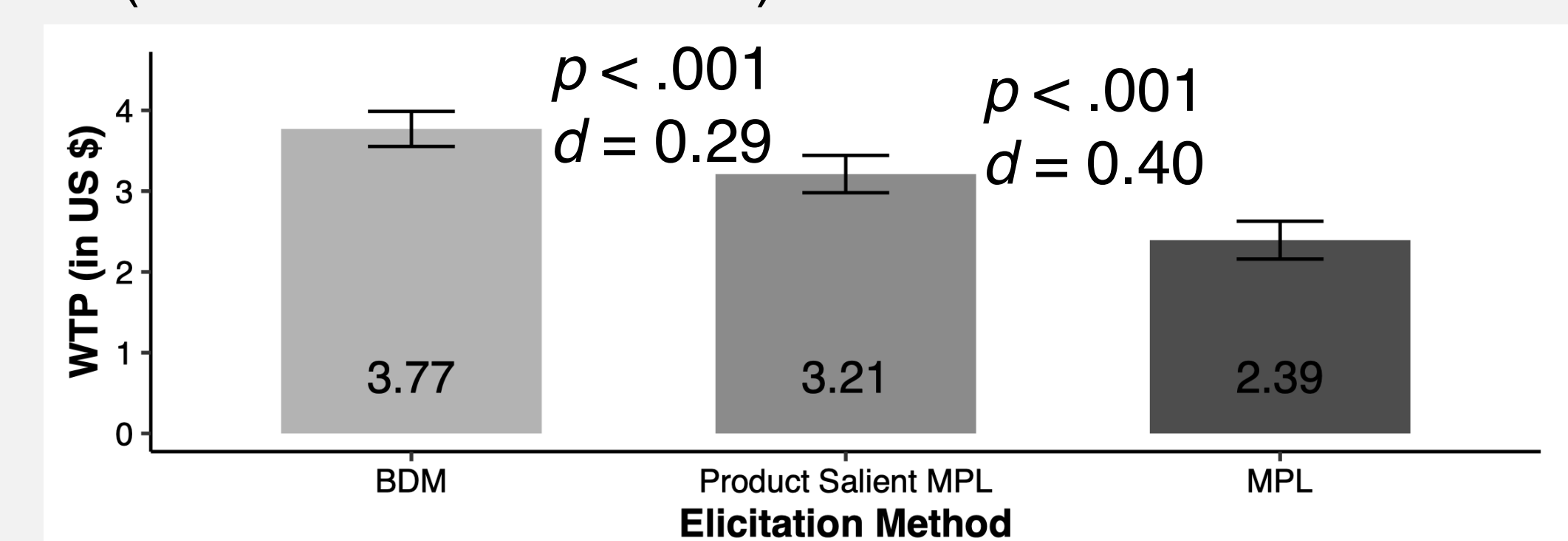
Design. MTurk workers were assigned to between-subjects conditions in 2 (Format: Digital vs. Physical) × 2 (Method: BDM vs. MPL) design



Interaction between Format and Method: $p = .021$

Study 10 (N = 902): Difference seems partially driven by salience of money / opportunity cost

Describing the options as "Buy [Product]" and "Not Buy [Product]" attenuates (but does not eliminate) the MPL-BDM difference.



References

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- Andersen, S., Harrison, G. W., Lau, M. I., & Rutström, E. E. (2007). Valuation using multiple price list formats. *Applied Economics*, 39(6), 675–682.
- Becker, G. M., DeGroot, M. H., & Marschak, J. (1964). Measuring utility by a single-response sequential method. *Behavioral Science*, 9(3), 226–232.