How Well Do Parents Know Their Own Preferences When Making School Choice Decisions?

Trent N. Cash & Daniel M. Oppenheimer

Carnegie Mellon University, Department of Social & Decision Sciences/Department of Psychology

Abstract

- School choice initiatives assume that parents can accurately identify and self-report their preferences.
- Across two studies, we found that correlations between stated and revealed (via CBC) attribute weights in school choice decisions were surprisingly low, thus indicating that **participants lacked metacognitive knowledge of their preferences.**

Motivation

- School choice initiatives, which are becoming increasingly popular (NCES, 2019), assume that parents can accurately introspect to determine what attributes they think are important in a school.
- However, research suggests that decision-makers lack this kind of metacognitive knowledge and often cannot identify factors that influence their decisions (e.g., Nisbett & Wilson, 1977; Suk & Yoon, 2012).
- If parents lack this kind of metacognitive knowledge, they are to likely make suboptimal school choices.
- As such, we sought to evaluate participants' metacognitive knowledge of the weight they place on various attributes in school choice decisions.

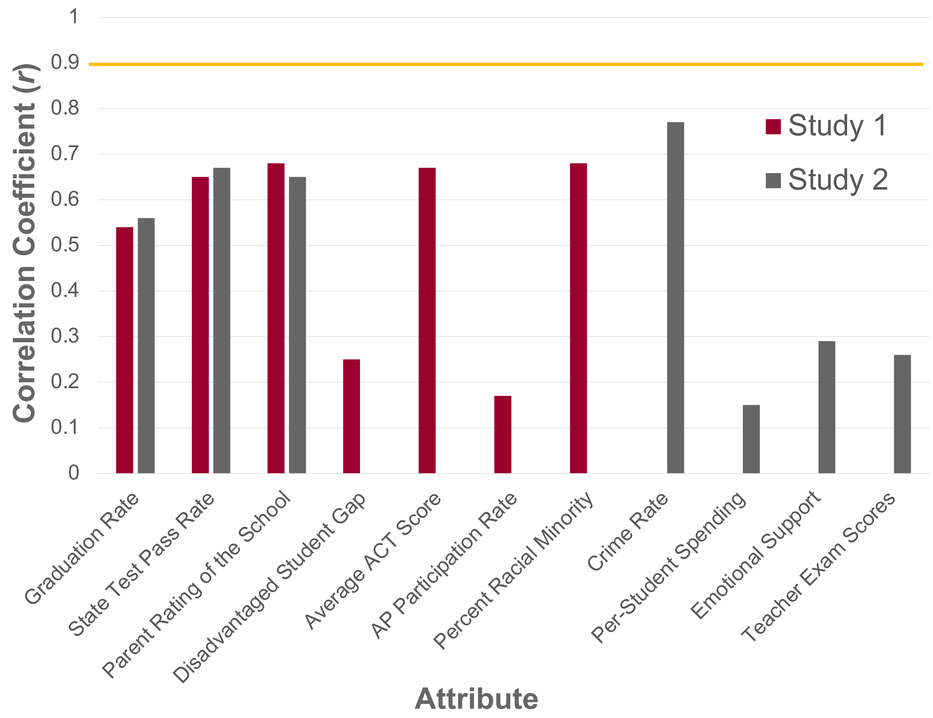
Methods (2 Studies)

- MTurk participants (*n*s = 191, 214) were told to imagine they were parents picking between high schools for their children to attend.
- Participants first completed a Choice-Based Conjoint survey in which they made 14 choices (Example in **Figure 1**) between sets of 3 schools based on 7 attributes. Studies 1 and 2 used different, but overlapping, sets of attributes (See **Figure 2**).
- Participants then self-reported (in percentages) the weight they placed on each attribute when making their choices.

Figure 1: Example CBC Task (Study 2)

Average Parent Rating of the School	2 Stars	5 Stars	4 Stars
Per-Student Spending	$11,000	$7,000	$13,000
Average Teacher Exam Score Percetile	70th	30th	60th
Emotional Support Score	2.0	2.8	3.6
Graduation Rate	85%	95%	80%
Percent of Students Who Pass State Tests	65%	20%	80%
School Crime Rate per 1,000 Students	45	60	75
	Select	Select	Select

Figure 2: Correlations Between RAWs & SAWs



Analysis

- We estimated Revealed Attribute Weights (RAWs) from the Choice-Based Conjoint data using Hierarchical Bayes Estimation (Sawtooth Software, 2021).
- We then calculated correlations between RAWs and the Stated Attribute weights (SAWs) that were self-reported by participants.
- We benchmarked perfect metacognitive knowledge by simulating 200 respondents that made choices based on randomly assigned attribute weights. The average correlation between RAWs and weights was ***r* = .89.**
- Finally, we used Fisher's *r* to *z* transformations to compare correlations between the participants and the simulated respondents.

Results & Discussion

- The average correlations between RAWs and SAWs for participants were *r* = .52 (Study 1) and *r* = .48 (Study 2). These correlations were surprisingly low, given that SAWs were participants' estimates of their own RAWs.
- Correlations between RAWs and SAWs for each attribute (*r*s = 15 - .77; reported in **Figure 2**) were significantly lower (*z*s = 4.20 – 13.02; *p*s < .001) than the average correlation for the simulated respondents (*r* = .89; orange line in **Figure 2**). These results were robust to splitting the data by gender, education level, or parental status.
- Our findings suggest that parents lack the necessary metacognitive knowledge to accurately determine and report their school choice preferences, thus presenting a roadblock to the success of school choice initiatives.

References

National Center for Education Statistics (2019). *School Choice in the United States: 2019*. Institute of Education Sciences.

Nisbett, R. E., & Wilson, T. D. (1977). Telling more than we can know: Verbal reports on mental processes, *Psychological Review, 84*(3), 231-259.

Sawtooth Software (2021). *Lighthouse Studio* (Version 9.11.0) [Computer software]. https://sawtoothsoftware.com/lighthouse-studio

Suk, K., & Yoon, S.-O. (2012). The moderating role of decision task goals in attribute weight convergence. *Organizational Behavior and Human Decision Processes, 118*(1), 37-45.