



ACSI Working Paper No. 2023-01

## How Do Parents Choose Schools for Their Children? Experimental Evidence from the Private Christian School Sector

[Matthew H. Lee](#)

Kennesaw State University

[Alison Johnson](#)

University of Arkansas

[Albert Cheng](#)

University of Arkansas

Research documents that nearly all parents of school-aged children in the general U.S. population strongly consider academic quality when choosing a school for their children. Many of these parents also prefer a religious setting for their children's education. However, little is known about how these school characteristics affect the stated preferences of parents of children in private faith-based schools. We conducted a conjoint experiment in which we presented 2,474 parents with three sets of three hypothetical schools, randomly varying each school's tuition level and the quality of each school's academics, spiritual formation, and extracurricular opportunities. We found that lower quality spiritual formation and academic offerings substantially reduce the likelihood a school will be selected by about 30 percentage points. The quality of extracurricular opportunities and tuition levels influence the likelihood a school will be selected to a lesser degree — about 11 percentage points.

How do parents choose schools for their children?

Experimental evidence from the private Christian school sector

Matthew H. Lee<sup>1\*</sup>, Alison Johnson<sup>2</sup>, & Albert Cheng<sup>2</sup>

<sup>1</sup>Kennesaw State University

<sup>2</sup>University of Arkansas

Author Note

\*Corresponding author.

Email: [hmatthewlee@gmail.com](mailto:hmatthewlee@gmail.com)

MD 0403

560 Parliament Garden Way NW

Kennesaw, GA 30144

Statement on Replication: Per our dating-sharing agreement with the Association of Christian Schools International, data are not available for replication.

Conflict of Interest Statement: The authors declare that they have no conflicts of interest.

Funding Sources: The authors declare no funding sources.

### Abstract

Research documents that nearly all parents of school-aged children in the general U.S. population strongly consider academic quality when choosing a school for their children. Many of these parents also prefer a religious setting for their children's education. However, little is known about how these school characteristics affect the stated preferences of parents of children in private faith-based schools. We conducted a conjoint experiment in which we presented 2,474 parents with three sets of three hypothetical schools, randomly varying each school's tuition level and the quality of each school's academics, spiritual formation, and extracurricular opportunities. We found that lower quality spiritual formation and academic offerings substantially reduce the likelihood a school will be selected by about 30 percentage points. The quality of extracurricular opportunities and tuition levels influence the likelihood a school will be selected to a lesser degree — about 11 percentage points.

*Keywords:* School choice, parental preference, conjoint experiment, randomized controlled trial, Christian schools

## **How do parents choose schools for their children?**

### **Experimental evidence from the private Christian school sector**

Private schools, especially religious schools, have experienced significant enrollment increases since the COVID-19 pandemic, with much of the growth concentrated in the early elementary grades (Dee, 2023). Catholic school enrollment increased 4 percent between the 2020-21 and 2021-22 school years (Porter-Magee et al., 2022). Similarly, Protestant Christian school enrollment grew by nearly 90 students on average between 2017-18 and 2022-23 (Lee & Price, 2022). With new private school choice policies passing in many states across the United States since 2022, more parents will likely seek out private school education for their children (DeAngelis, 2023). What is driving the surge of interest in faith-based schooling is the subject of much research. Which school characteristics parents do consider when choosing a school for their child and what draws parents to faith-based schools?

Studies about why parents choose particular schools for their children usually rely on samples of charter or traditional public school parents (Abdulkadiroğlu et al., 2020; Glazerman & Dotter, 2017; Hastings et al., 2009; Hastings & Weinstein, 2008). Although private religious schools comprise roughly two-thirds of all private schools in the U.S. (Broughman et al., 2021), little is known about parental preference in choosing private religious schools. Moreover, the existing research about why parents choose faith-based private schools instead of other options are based on surveys that ask parents to indicate their stated preferences for a private school after they have enrolled their child in the private school (Erickson, 2017). This research design poses a major limitation: whether these indications of stated preferences caused parents to select their child's private school or are post-hoc rationalizations of their choice is unclear. Moreover, data from surveys that ask parents to identify school characteristics that explain their preferences do

not allow for estimating the relative weight that parents place on each characteristic. Our present study aims to address these limitations with a survey experiment of parental preference in private Christian schools. We present parents with multiple sets of different hypothetical schools that randomly vary in tuition levels, academic quality, the quality of their spiritual formation offerings, and the availability of extracurricular opportunities. Based on the parents' choice of school, we estimate how much weight parents place on each of these four school characteristics.

We find evidence that parents of children enrolled in these schools strongly consider the quality of spiritual formation and academic quality when stating a school preference. Parents also consider tuition and extracurricular offerings, but to a lesser degree. We also find patterns of parental preference are largely similar across various parent subgroups, with some notable exceptions. The remainder of the paper is organized as follows. We begin by reviewing the relevant research literature on parental preferences in school choice settings. We continue by describing our methodology, including data, sample, and empirical strategy. We then present our main findings and subgroup analyses. Finally, we conclude with a discussion of our findings, including limitations and implications.

## **Literature Review**

### **Parent-preferred school characteristics**

There is much research evidence demonstrating that parents almost always consider academic quality when making a schooling decision (Corcoran & Jennings, 2020; Erickson, 2017; Hanushek et al., 2007). However, this stated preference is usually constrained by limitations and tradeoffs, including distance, safety, and extracurricular offerings (Corcoran & Jennings, 2020; Erickson, 2017). Parental preferences for schools are also moderated by parents'

income, race, and how much they emphasize their child's academic achievement (Glazerman & Dotter, 2017; Hastings et al., 2009).

On the other hand, there is also evidence that parents may prioritize other school characteristics when making a schooling decision for their children. For example, Erickson's (2017) literature review concludes that other factors, including religious or moral instruction, often takes precedence over academic quality. Another study of Nashville parents suggests that decisions to opt out of public schools and into private schools were not a function of dissatisfaction with the previous school, but of the perception that parental involvement would be more highly valued and welcomed in private schools (Goldring & Phillips, 2008).

### **Information and parental choice**

Parental preferences for schools may also be a function of the information about available educational options. Many parents rely on school performance data and social networks to make enrollment decisions (Corcoran & Jennings, 2020). Research also finds that parents are sensitive to the way in which information is presented. A field experiment indicated that providing parents with simplified information about test score performance led to an increase in the average test score of the schools parents chose (Hastings et al., 2007; Hastings & Weinstein, 2008). Another study finds that parents may value a school's average level of student achievement rather than measures of school effectiveness at raising achievement (Abdulkadiroğlu et al., 2020).

Empirical research suggests that parents use information to make effective schooling decisions for their children. Meta-analyses of parental school choice in private school choice programs (Shakeel et al., 2021) and public charter schools (Betts & Tang, 2016) find positive effects of parental choice on student achievement, and analyses of competitive effects find that school choice benefits students who remain in residentially-assigned public schools (Egalite,

2013; Jabbar et al., 2022). Other empirical research confirms that the success of school choice policies is a function of parents' ability to choose. Hastings and Weinstein's (2008) field experiment found that parents chose schools with higher levels of academic achievement when exposed to simplified information about their options, and that student achievement improved as a result of parental choice. Bast and Wahlberg's (2004) review of empirical research concludes that parents are at least as capable if not more capable than experts in government agencies at choosing schools for their children. Three studies conducted outside the U.S. using a quasi-experimental regression discontinuity design find that attending a parent-preferred school improves students' short-run outcomes, such as academic achievement and attainment, as well as long-run outcomes, such as employment earnings and rank and health outcomes (Beuermann et al., 2022; Beuermann & Jackson, 2022; Ovidi, 2021). Research of U.S. religious schools also has demonstrated positive effects on those outcomes as well as religious formation and civic values (Foreman, 2017; Hill & Den Dulk, 2013; Uecker, 2008)

### **Parental choice and faith-based schools**

While much of the research on parental preference and school choice in the U.S. has been carried out in traditional public school settings, scholars who have studied preferences for faith-based schools have found that parents often prefer them because of the availability of religious or moral instruction. Catholic and Protestant Christian schools, in particular, are well-known among parents of school-aged children for their provision of religious and moral instruction (Cheng et al., 2016; Erickson, 2017; Trivitt & Wolf, 2011). On surveys of the U.S. population, parents often list a religious learning environment among the top reasons for choosing a faith-based school (EdChoice, 2022; Kisida et al., 2015).

However, there are two key limitations to the research about parental preferences for faith-based schools. First, because this research is conducted after parents have enrolled their children in such a school, it is not clear whether these stated preferences are parents' post-hoc rationalizations of their choice or key factors that drew them to their current school. Research on decision-making processes has frequently observed the bias that is introduced when individuals, after having made a choice among options, misremember information about their options to elevate their choice and denigrate the other options (Lind et al., 2017). Furthermore, prior research of parental preferences for schools typically presents parents with a list of school characteristics and then asks them to rate how salient each characteristic was for selecting their child's current school. Collecting data in such a manner precludes researchers from estimating the salience of one characteristic relative to another because parents are effectively considering each characteristic in isolation from another. In this study, we address these limitations to understanding parental preferences by administering a conjoint experiment.

### **Conjoint experiments in education research**

Conjoint analysis is a helpful analytic strategy commonly used in market research to study consumer preferences in complex contexts with multiple varying characteristics (Leeper et al., 2020). In a conjoint experiment, a subject is presented with a set of multiple candidates with randomly assigned characteristics. Randomization allows a researcher to estimate average marginal component effects (AMCEs), thus providing insight into the effect of each component on consumer choice as well as the relative importance of each component.

Our study is similar in research design to other conjoint analyses in education contexts. Giersch and Dong (2018) surveyed North Carolina public school principals on hypothetical teacher hires and found they prefer teachers with more experience and higher levels of education,



but also that the highest levels of experience and education are not necessarily more desirable. Azarcon and coauthors (2014) examined higher education students' decision to stay or leave their institution and found that quality of education is the most important consideration, but also that quality of faculty and changes in total fees significantly affect their decision. Crawford et al. (2021) used conjoint analysis to understand policymaking and found policymakers in developing countries prioritize vocational skills over foundational skills. To understand parents' consumer preferences and the relative importance of various school characteristics, we use a similar methodology, which we describe in the following section.

## **Methodology**

### **Data**

Our data come from a validation study of the Flourishing Faith Index (FFI) collected by the Association of Christian Schools International (ACSI) in the fall of 2022 (Lee et al., 2023). In total, 33 schools broadly representative of ACSI membership participated in the validation study, which included responses from nearly 10,000 students, administrators, teachers, staff members, board members, alumni, and parents.

### **Sample**

Importantly for this present study, 2,474 parents responded to the survey. On average, parental respondents had 1.71 children currently enrolled in the private Christian school with a median of two children and a maximum of eight children. These parents had at least one child enrolled for an average of 5.12 years, with a median of four years and a maximum of 24 years. Educational attainment levels for the sample of respondents were higher than the national average, with 44 percent having a bachelor's degree and 32 percent reporting education beyond a bachelor's degree as their highest degree. The modal respondent self-reported as a "non-

denominational” Christian (33 percent), though another third identified most closely with a specific Christian denomination. The sample was three-quarters female and nine-tenths White. Respondents were 43.8 years old on average with a range of 26 to 78. Ninety-three percent reported currently being married, and three quarters reported a homogamous marriage in which both the spouse and the respondent are “strong Christians.” Two-thirds of the sample reported an annual household income in excess of \$100,000 (see Table 1).

[Table 1 about here]

We queried respondents for their satisfaction with their child’s private Christian school. Respondents indicated on a five-point Likert scale (ranging from 1 = “Very dissatisfied” to 5 = “Very satisfied”) how satisfied they were with respect to five school characteristics, and the likelihood they would recommend the school to a friend or family member (ranging from 1 = “Very unlikely” to 5 = “Very likely”). Overall, the sample was very satisfied with their school (see Table 2). In addition to being “very likely” to recommend their school to a friend or family member (mean = 4.37), respondents were also very satisfied with the school overall (4.21), the school’s teachers (4.20), and the child’s education (4.20). They were least satisfied with spiritual formation (4.14) and the value for tuition (3.98), though even there the schools earned high marks. We also estimated overall parental satisfaction as the average of these six items.

[Table 2 about here]

Respondents also answered the question, “Which of the following statements best describes your understanding of a biblical philosophy of Christian education?” Available options included the Great Commission (i.e., that the school would “disciple” or train a child in the Christian faith), the Great Commandment (i.e., that the school provide a loving environment for the child), and partnership with parents, who principally oversee the child’s education and

spiritual formation. According to Johnson and Lee (2023b, 2023a), most teachers and administrators hold that a partnership with parents is the biblical philosophy of Christian education (roughly two-thirds), followed by the Great Commission (roughly one-quarter) and the Great Commandment (roughly 6.6 percent). While the relative ranking of these biblical philosophies holds the same, parents were far more likely to prefer partnership with parents (82.1 percent) as the foundation for Christian education (see Table 3).

[Table 3 about here]

Finally, respondents were asked to rank their top reasons for choosing the current private Christian school among nine options (see Table 4). Over 60 percent of all parent respondents chose spiritual formation as the top reason and an additional 15.1 percent ranked it second. Academics (12.4 percent ranked first) and school culture (13.2 percent ranked first) were also highly regarded. The lowest ranked reasons included discipline (0.7 percent), athletics (0.2 percent), and professional or vocational opportunities (0.7 percent).

[Table 4 about here]

### **Stated Preferences Experiment**

We embedded a conjoint or stated preferences experiment in this pilot survey in which we presented parents with a set of three hypothetical school choices, each with four randomly assigned attributes, and asked them to choose the one school they preferred among the three. Each parent chose three schools among nine options across three sets. The school attributes that were featured were academic quality, quality of spiritual formation offerings, athletics and extracurricular options, and tuition. For tuition, we randomly assigned one of three descriptions: 10% lower than current school, the same as current school, 10% higher than current school. For the remaining three attributes, we randomly assigned one of three descriptions: quality below the

level of their child's current school, quality at the same level of their child's current school, or quality at a higher level than their child's current school (see Table 5). More than one attribute could vary across the three schools within a set.

We hypothesize that a school having a higher level of academic quality, spiritual formation, and athletics and extracurriculars will increase the likelihood a school will be chosen, as prior research documents evidence that these are characteristics that parents prioritize when choosing a school (Corcoran & Jennings, 2020; Erickson, 2017; Hanushek et al., 2007). We further hypothesize that a lower level of tuition relative to the child's current school would yield a greater likelihood of being preferred by the parent, as higher tuition levels would constrain a parent's ability to choose a school (Corcoran & Jennings, 2020). Given that academic quality and the availability of religious instruction often ranks highest among reasons for selecting a religious school, we additionally hypothesize that the quality of academic and spiritual formation opportunities will be more salient than tuition and extracurricular opportunities for explaining parents' choices (Erickson, 2017).

### **Empirical Strategy**

Because hypothetical school attributes were randomly assigned, this stated preferences experiment allows us to identify the causal effect of each attribute on increasing the likelihood the parent respondent would choose the school. We assume parents choose a school from among  $q = 1, \dots, Q$  options based on a latent utility model where unobserved utility ( $U_q$ ) is a function of the school  $j$ 's academic quality ( $A_q$ ), the quality of school  $q$ 's spiritual formation offerings ( $S_q$ ), the quality of school  $q$ 's extracurricular opportunities ( $E_j$ ), and school  $q$ 's tuition level ( $T_q$ ).

$$U_j = f(A_j, S_j, E_j, T_j). \quad (1)$$

We assume a parent will choose a school from among the  $Q$  options if the utility of that school is greater than that of the other  $Q-1$  schools.

To estimate the average marginal component effect (AMCE) of each school characteristic on the likelihood a parent will choose a school, we assume linearity and use the following random effects model:

$$y_{qrs} = \beta_0 + \mathbf{A}_{qrs}'\beta_1 + \mathbf{S}_{qrs}'\beta_2 + \mathbf{E}_{qrs}'\beta_3 + \mathbf{T}_{qrs}'\beta_4 + \epsilon_{qrs} \quad (2)$$

where  $y_{qrs}$  is set to unity if school  $q$  presented to respondent  $r$  in set  $s$  is chosen and zero otherwise. Note that  $s = 1, 2, \text{ or } 3$  because we presented respondents with schools in sets of three, and  $q = 1, 2, 3, \text{ or } 4$  because we presented respondents with four schools in each set.

In Equation 2,  $\mathbf{A}_{qrs}$  is a vector of two dummy variables indicating the randomly assigned description of the academic quality of school  $q$  in choice set  $s$ . More specifically, the two variables indicate if school  $q$  has high academic quality or low academic quality. Schools with modest academic quality serve as the omitted category, so that  $\beta_1$  provides an estimate of the change in likelihood that respondent  $r$  prefers a school with higher or lower academic quality relative to a school with modest academic quality.

Meanwhile,  $\mathbf{S}_{qrs}$  is a vector of two dummy variables indicating the randomly assigned description of the quality of spiritual formation offerings of school  $q$  in choice set  $s$ . The two variables indicate if school  $q$ 's spiritual formation offerings are higher or lower quality than the current school for respondent  $r$ 's child. With schools that have spiritual formation offerings that are similar in quality to the current school for respondent  $r$ 's child,  $\beta_2$  provides an estimate of the change in likelihood that respondent  $r$  prefers a school where the quality of spiritual formation offerings is higher or lower than her child's current school instead of a school where the spiritual formation offerings that are similar in quality to her child's current school.

The vector  $E_{qrs}$  is similar to  $S_{qrs}$ , except that it contains dummy variables that indicate whether the quality of school  $q$ 's extracurricular offerings are higher or lower than the school currently attended by respondent  $r$ 's child. Similar to  $\beta_2$ ,  $\beta_3$  provides an estimate of the change in likelihood that respondent  $r$  prefers a school where the quality of extracurricular offerings is higher or lower than his child's current school instead of a school where the extracurricular offerings that are similar in quality to his child's current school.

$T_{qrs}$  is a vector of two dummy variables that indicate whether school  $q$ 's tuition level is 10 percent higher or 10 percent lower than the child of respondent  $r$ 's current school. With the description that school  $q$ 's tuition level is about the same as the child of respondent  $r$ 's current school,  $\beta_4$  provides an estimate of the effect that a 10 percent increase or decrease in tuition would have on respondent  $r$ 's preference for school  $q$  relative to another school where the tuition level is about the same as her child's current school.

Lastly,  $\epsilon_{qrs}$  represents an idiosyncratic error term. Because all respondents indicated preferences for 3 different choice sets of schools, we cluster standard errors at the respondent level to correct for the non-independence of observations in our data that originate from the same respondent. We report AMCEs for our main results and marginal means for subgroup analyses (Leeper et al., 2020).

## Findings

### Main Results

As hypothesized, we found that a higher level of academic quality as well as higher quality spiritual formation offerings and less expensive tuition, relative to the child's current school, increased the likelihood of a school being preferred by the parent. Conversely, parents were much less likely to prefer a school with a lower level of academic quality relative to current

school. Likewise, parents were less likely to prefer schools with spiritual formation offerings or extracurricular offerings that were lower in quality compared to their child's current school.

Parents were also less likely to prefer schools with tuition levels that were 10 percent higher than the amount they are currently paying relative to schools with tuition levels that were about the same as the amount they are currently paying. Contrary to our hypothesis, we found that better athletic and extracurricular offerings had no effect on the likelihood of being preferred.

The AMCEs are presented in the first column of Table 6. Many of our findings are intuitive given the analytic sample. As parents ranked spiritual formation and academic quality the top two reasons for choosing a school, so we found that variation in these attributes produced effect sizes of greatest magnitude. Respondents are 8 percentage points more likely to prefer a school with spiritual formation offerings that were of higher quality than the offerings in their child's current school relative to a school with spiritual formation offerings that were similar in quality with their child's current school. Having a higher level of academic quality relative to current school improved likelihood a school was preferred by 7 points. In contrast, a school where the quality of spiritual formation offerings was lower than the child's current school reduced likelihood by 32 points. Schools with a lower level of academic quality relative to current school were less likely preferred by 28 points.

Changes in tuition, as well as the quality of athletics and extracurricular offerings, produced effects of smaller magnitudes. Respondents were 3 percentage points more likely to prefer schools with tuitions that were 10 percent lower than the tuition level of their child's current school. On the other hand, respondents were 11 percentage points less likely to choose a school with tuition levels 10 percent higher than the tuition level of their child's current school. With respect to athletics and extracurriculars, only having lower quality offerings relative to the

child's current school produced an effect, reducing likelihood of being preferred by 11 percentage points, while expanding offerings did not produce any effect.

[Table 6 about here]

### **Subgroup Analyses**

We also estimated effects for subgroups based on parent characteristics using our model. We present results graphically by grade levels of children enrolled in Figure 1, by top ranked reason for choosing school in Figure 2, by parent's education in Figure 3, by household income in Figure 4, and by overall parental satisfaction in Figure 5. We considered parents with an overall average exceeding 4 as "very satisfied" with their child's school (1,523 of 2,397 parents were "very satisfied"). We present marginal means (MMs) and 95 percent confidence intervals separately by subgroup.

[Figures 1-5 about here]

Overall, we find similar patterns of school preference across parent subgroup, with 95 percent confidence intervals of one group generally overlapping with marginal means of others, with a few exceptions. Parents of early childhood or elementary students (grades five or lower) were more sensitive to changes in tuition than parents of middle or high school students (grades six or higher). As expected, the quality of spiritual formation affected parents ranking "spiritual formation" as the top reason for choosing a school more than other subgroups. Likewise, the academic quality of the school affected parents ranking "academics" as the top reason more than other parent subgroups (see Figure 2). Parents with higher levels of education were also more likely to be affected by the academic quality of the school than parents with a bachelor's or lower (see Figure 3). Parents earning more than \$150,000 were more likely to consider the quality of athletics and extracurriculars and less likely to consider the quality of spiritual formation than



parents earning less (see Figure 4). Parents earning less than \$150,000 were more sensitive to changes in tuition. Finally, very satisfied parents were less likely to choose a school if the quality of spiritual formation was below the level of their current school (see Figure 5).

## **Discussion**

### **Contributions and Connections to Prior Literature**

Our study makes a valuable contribution to the research literature by providing experimental evidence of how school characteristics affect parental choice in the private Christian school sector. We find evidence of how school characteristics affect parental preference in the private Christian school sector. Parents with children in private Christian schools highly value spiritual formation. It is most commonly stated as their top reason for choosing a private school (Table 4), and the quality of spiritual formation produced the largest average marginal component effects on the likelihood a parent would choose a particular school. These results are consistent with the research about parents who choose faith-based schools for their children. These parents place a strong priority on religious and moral education, and so the sensitivity of Christian-school parents in our sample to the quality of spiritual formation is reflective of parents in other studies (Cheng et al., 2016; Erickson, 2017).

At the same time, we find evidence that this priority is not at the expense of academics, commonly stated as the second most important reason for choosing a private school. Academic quality produced the second largest AMCEs in our experiment. Parents are sometimes portrayed in popular media for making poor schooling decisions for their children by choosing schools that are not the most effective at raising academic achievement (Strauss, 2023; Prothero, 2020; Cornwall, 2017). There is evidence that graduates of Protestant Christian secondary schools eventually complete slightly fewer years of education than graduates of traditional public,

Catholic, and non-sectarian private schools, though the differences are statistically insignificant (Casagrande et al., 2019). Moreover, qualitative case studies of some Protestant Christian schools document some anti-intellectualism (Alexander, 2022). However, our findings together with other research demonstrating that academic quality is always among the characteristics that parents consider in a school call into question the claims that parents of religious schools give little no consideration regarding academic quality (Corcoran & Jennings, 2020; Erickson, 2017). Parents in our sample may prefer spiritual formation in principle but they seem to consider academic quality just as strongly.

Scholars have documented the importance that parents place on extracurricular opportunities when choosing a school (Barrows et al., 2019; Erickson, 2017). Yet it appears in our sample, that extracurricular opportunities are less salient than the quality of academic and spiritual formation opportunities. The quality of athletics and extracurricular opportunities are secondary considerations, producing effects of smaller magnitude. Consistent with our results, Cheng et al. (2016) found that parents participating in the Milwaukee Parental Choice Program who felt that the availability of extracurricular opportunities was an important school characteristic were less likely to prefer religious private schools. However, parents were nearly twice as likely to prefer faith-based schools to secular private or traditional public schools if they felt that the availability of religious instruction was an important school characteristic.

Parents in our sample are generally satisfied with their schools. School quality measures at levels lower than their current school produced negative effects roughly four times the size of school quality measures at levels higher than their current school. For instance, parents were eight percentage points more likely to select schools where the quality of spiritual formation opportunities was higher than the parents' current school, but they were 32 points less likely to

select schools where the where the quality of spiritual formation opportunities was lower than their current school. This finding suggests that parents are unwilling to switch to a less desirable school but unlikely to be attracted by a more desirable school. Though we did not hypothesize these patterns, they are consistent with the long-standing psychological and economic literature on loss aversion (Kahneman & Tversky, 1979). That is, individuals tend to be more sensitive to losing something they already possess than not obtaining something they do not already have.

Finally, parents of all subgroups analyzed generally exhibited similar patterns of preference. We did find some predictable exceptions; parents who primarily chose their child's Christian school because of spiritual formation opportunities were less likely to choose a school where the quality of spiritual formation opportunities would decrease (Figure 2). Although prior research has found that schooling preferences are moderated by parents' income, race, and how much they emphasize their child's academic achievement (Glazerman & Dotter, 2017; Hastings et al., 2009), we found little difference by income and no differences by race. When we examined preferences by parents' education, the grade level of their child, satisfaction levels, and primary reasons for choosing the school, we found little to no differences. Future research ought to consider other subgroups. For instance, does parents' religiosity moderate preferences for certain aspects of religious schools?

### **Limitations**

As a stated preferences experiment, our analysis is limited in several important ways. First, we measure parents' stated rather than revealed preferences. We cannot actually observe how changes in real school attributes would influence real behaviors, as such choices bear greater costs to families. Second is the problem of the "black box"; while respondents are given a reference point to compare academic quality, spiritual formation, extracurricular offerings, and

tuition to their current school, we cannot definitively say what a higher level of academics or spiritual formation entails. Finally, as a stated preferences experiment in the private Christian school sector, these results likely do not generalize to other schools, whether public or private with a non-Christian faith tradition. Parents in those sectors likely have distinct reasons for choosing those schools and would respond to changes in these attributes differently.

Despite these limitations, this study is the first attempt to study parental preferences for religious schools using a conjoint experiment. Because of this research design, we are able to avoid two limitations of the existing research about why parents choose religious schools. First, we are able to estimate the relative salience of each of school characteristic by asking parents to consider all of them simultaneously within the context of a randomized experiment. Unlike prior research which often asks parents to rate the importance of various school characteristics in isolation, our data reflects the tradeoffs that parents make as they consider multiple school characteristics. Second, we were able solicit parents' stated preferences that are not biased by choice-supportive misremembering (Lind et al., 2018). Unlike prior research that asked parents to explain and, perhaps, rationalize why they chose a particular school for their child, our conjoint experiment allowed us to estimate the effect of each school characteristic on parents' stated preferences. We encourage future research about the schooling preferences of parents to avail themselves of conjoint experiments, while also building upon what we have done in this study.

## References

- Abdulkadiroğlu, A., Pathak, P. A., Schellenberg, J., & Walters, C. R. (2020). Do Parents Value School Effectiveness? *American Economic Review*, *110*(5), 1502–1539.  
<https://doi.org/10.1257/aer.20172040>
- Alexander, J. (2022). Democratic Education in Conservative Christian Schools. *Democracy & Education*, *30*(1), 1–10.
- Azarcon, D. E., Gallardo, C. D., Anacin, C. G., & Velasco, E. (2014). Attrition and retention in higher education institution: A conjoint analysis of consumer behavior in higher education. *Asia Pacific Journal of Education, Arts and Sciences*, *1*(5), 107–118.
- Barrows, S., Cheng, A., Peterson, P. E., & West, M. R. (2019). Do charters pose a threat to private schools? Evidence from nationally representative surveys of U.S. parents. *Journal of School Choice*, *13*(1), 10–32. <https://doi.org/10.1080/15582159.2018.1547589>
- Bast, J. L., & Walberg, H. J. (2004). Can parents choose the best schools for their children? *Economics of Education Review*, *23*(4), 431–440.  
<https://doi.org/10.1016/j.econedurev.2003.08.003>
- Betts, J. R., & Tang, Y. E. (2016). *A meta-analysis of the literature on the effect of charter schools on student achievement*. Society for Research on Educational Effectiveness.  
<https://eric.ed.gov/?id=ED566972>
- Beuermann, D. W., & Jackson, C. K. (2022). The Short- and Long-Run Effects of Attending the Schools that Parents Prefer. *Journal of Human Resources*, *57*(3), 725–746.  
<https://doi.org/10.3368/jhr.57.3.1019-10535R1>

- Beuermann, D. W., Jackson, C. K., Navarro-Sola, L., & Pardo, F. (2022). What is a Good School, and Can Parents Tell? Evidence on the Multidimensionality of School Output. *The Review of Economic Studies*, rdac025. <https://doi.org/10.1093/restud/rdac025>
- Broughman, S., Kincel, B., Willinger, J., & Peterson, J. (2021). *Characteristics of private schools in the United States: Results from the 2019-20 Private School Universe Survey first look* (NCES 2021-061). National Center for Education Statistics. <https://nces.ed.gov/pubs2021/2021061.pdf>
- Casagrande, M., Pennings, R., & Sikkink, D. (2019). *Cardus Education Survey 2018: Rethinking public education*. Cardus. <https://www.cardus.ca/research/education/reports/rethinking-public-education/>
- Cheng, A., Trivitt, J. R., & Wolf, P. J. (2016). School Choice and the Branding of Milwaukee Private Schools. *Social Science Quarterly*, 97(2), 362–375. <https://doi.org/10.1111/ssqu.12222>
- Corcoran, S. P., & Jennings, J. L. (2020). Information and school choice. In M. Berends, A. P. Berends, & M. G. Springer (Eds.), *Handbook of research on school choice* (2nd edition, p. 14). Routledge.
- Cornwall, G. (2017, October 18). Why parents make flawed choices about their kids' schooling. *The Atlantic*. <https://www.theatlantic.com/education/archive/2017/10/can-parents-really-pick-the-best-schools-for-their-kids/543201/>
- Crawford, L., Hares, S., Minardi, A., & Sandefur, J. (2021). *Understanding education policy preferences: Survey experiments with policymakers in 35 developing countries* (Working Paper 596; p. 55). Center for Global Development.

<https://www.cgdev.org/sites/default/files/understanding-education-policy-preferences-survey-experiments-policymakers-35-developing.pdf>

DeAngelis, C. (2023, March 10). 2023 Is Already a Record Year for School Choice. *Wall Street Journal*. <https://www.wsj.com/articles/2023-is-already-a-record-year-for-school-choice-parent-student-nebraska-arkansas-dc10dc5a>

Dee, T. S. (2023). Where the Kids Went: Nonpublic Schooling and Demographic Change during the Pandemic Exodus from Public Schools. *Teachers College Record: The Voice of Scholarship in Education*, 125(6), 119–129. <https://doi.org/10.1177/01614681231190201>

EdChoice. (2022). 2022 Schooling in America: Exploring 10 Years of Public Opinion on K-12 Education. EdChoice. <https://www.edchoice.org/wp-content/uploads/2022/11/2022-SIA-powerpoint-FOR-WEB-3-FIXED.pdf>

Egalite, A. J. (2013). Measuring competitive effects from school voucher programs: A systematic review. *Journal of School Choice*, 7(4), 443–464. <https://doi.org/10.1080/15582159.2013.837759>

Erickson, H. H. (2017). How do parents choose schools, and what schools do they choose? A literature review of private school choice programs in the United States. *Journal of School Choice*, 11(4), 491–506. <https://doi.org/10.1080/15582159.2017.1395618>

Foreman, L. M. (2017). Educational attainment effects of public and private school choice. *Journal of School Choice*, 11(4), 642–654. <https://doi.org/10.1080/15582159.2017.1395619>

Giersch, J., & Dong, C. (2018). Principals' preferences when hiring teachers: A conjoint experiment. *Journal of Educational Administration*, 56(4), 429–444. <https://doi.org/10.1108/JEA-06-2017-0074>

- Glazerman, S., & Dotter, D. (2017). Market Signals: Evidence on the Determinants and Consequences of School Choice From a Citywide Lottery. *Educational Evaluation and Policy Analysis*, 39(4), 593–619. <https://doi.org/10.3102/0162373717702964>
- Goldring, E. B., & Phillips, K. J. R. (2008). Parent preferences and parent choices: The public–private decision about school choice. *Journal of Education Policy*, 23(3), 209–230. <https://doi.org/10.1080/02680930801987844>
- Hanushek, E. A., Kain, J. F., Rivkin, S. G., & Branch, G. F. (2007). Charter school quality and parental decision making with school choice. *Journal of Public Economics*, 91(5–6), 823–848. <https://doi.org/10.1016/j.jpubeco.2006.09.014>
- Hastings, J. S., Kane, T. J., & Staiger, D. O. (2009). *Heterogeneous preferences and the efficacy of public school choice*. Yale University. [http://justinehastings.com/wp-content/uploads/2016/12/HKS\\_Combined\\_201006.pdf](http://justinehastings.com/wp-content/uploads/2016/12/HKS_Combined_201006.pdf)
- Hastings, J. S., & Weinstein, J. M. (2008). Information, school choice, and academic achievement: Evidence from two experiments. *Quarterly Journal of Economics*, 123(4), 1373–1414. <https://doi.org/10.1162/qjec.2008.123.4.1373>
- Hastings, J., Van Weelden, R., & Weinstein, J. (2007). *Preferences, Information, and Parental Choice Behavior in Public School Choice* (w12995; p. w12995). National Bureau of Economic Research. <https://doi.org/10.3386/w12995>
- Hill, J. P., & Den Dulk, K. R. (2013). Religion, Volunteering, and Educational Setting: The Effect of Youth Schooling Type on Civic Engagement: RELIGION, VOLUNTEERING, EDUCATIONAL SETTING. *Journal for the Scientific Study of Religion*, 52(1), 179–197. <https://doi.org/10.1111/jssr.12011>



- Jabbar, H., Fong, C. J., Germain, E., Li, D., Sanchez, J., Sun, W.-L., & Devall, M. (2022). The Competitive Effects of School Choice on Student Achievement: A Systematic Review. *Educational Policy*, 36(2), 247–281. <https://doi.org/10.1177/0895904819874756>
- Johnson, A., & Lee, M. H. (2023a). *Learning to Lead: An Analysis of the Administrator Pipeline in Christian Schools*. Association of Christian Schools International. <https://www.acsi.org/docs/default-source/website-publishing/research/admin-pipeline.pdf>
- Johnson, A., & Lee, M. H. (2023b). *Tending the Teacher Pipeline: An Analysis of the Teacher Pipeline in Christian Schools*. Association of Christian Schools International. <https://www.acsi.org/docs/default-source/website-publishing/research/teacher-pipeline.pdf>
- Kahneman, D., & Tversky, A. (1979). Prospect Theory: An Analysis of Decision under Risk. *Econometrica*, 47(2), 263. <https://doi.org/10.2307/1914185>
- Kisida, B., Wolf, P. J., & Rhinesmith, E. (2015). *Views from private schools: Attitudes about school choice programs in three states*. American Enterprise Institute. <http://www.aei.org/publication/views-private-schools-attitudes-school-choice-programs-three-states/>
- Lee, M. H., & Price, E. W. (2022). *ACSI schools weather pandemic storm with steady student achievement, in-person instruction, and enrollment growth*. Association of Christian Schools International. <https://www.acsi.org/docs/default-source/website-publishing/research/acsi-schools-weather-pandemic-storm.pdf>
- Lee, M. H., Price, E. W., & Swaner, L. E. (2023). *The Flourishing Faith Index: Measuring Biblical Worldview and Spiritual Formation in Christian Schools* (pp. 1–28). Association

- of Christian Schools International. <https://www.acsi.org/docs/default-source/website-publishing/research/flourishing-faith.pdf>
- Leeper, T. J., Hobolt, S. B., & Tilley, J. (2020). Measuring Subgroup Preferences in Conjoint Experiments. *Political Analysis*, 28(2), 207–221. <https://doi.org/10.1017/pan.2019.30>
- Lind, M., Visentini, M., Mäntylä, T., & Del Missier, F. (2017). Choice-Supportive Misremembering: A New Taxonomy and Review. *Frontiers in Psychology*, 8, 2062. <https://doi.org/10.3389/fpsyg.2017.02062>
- Ovidi, M. (2021). *Parents know better: Primary school choice and student achievement in London* (Working Paper No. 919). Queen Mary University of London, School of Economics and Finance. <https://www.econstor.eu/bitstream/10419/247188/1/wp919.pdf>
- Porter-Magee, K., Smith, A., & Klausmeier, M. (2022). *Catholic School Enrollment Boomed During Covid. Let's Make It More Than a One-Time Bump*. (pp. 1–16). Manhattan Institute. <https://media4.manhattan-institute.org/sites/default/files/Catholic-School-Enrollment-Boomed-During-Covid.pdf>
- Prothero, A. (2020, January 7). Why don't parents always choose the best schools? *Education Week*. <https://www.edweek.org/leadership/why-dont-parents-always-choose-the-best-schools/2020/01>
- Shakeel, M. D., Anderson, K. P., & Wolf, P. J. (2021). The participant effects of private school vouchers around the globe: A meta-analytic and systematic review. *School Effectiveness and School Improvement*, 32(4), 509–542. <https://doi.org/10.1080/09243453.2021.1906283>

Strauss, V. (2023, February 14). Parents know best—Except when they don't. *The Washington Post*. <https://www.washingtonpost.com/education/2023/02/14/parents-know-best-except-when-they-dont/>

Trivitt, J. R., & Wolf, P. J. (2011). School Choice and the Branding of Catholic Schools. *Education Finance and Policy*, 6(2), 202–245. [https://doi.org/10.1162/EDFP\\_a\\_00032](https://doi.org/10.1162/EDFP_a_00032)

Uecker, J. E. (2008). Alternative Schooling Strategies and the Religious Lives of American Adolescents. *Journal for the Scientific Study of Religion*, 47(4), 563–584. <https://doi.org/10.1111/j.1468-5906.2008.00427.x>

## Tables

Table 1. Respondent descriptive statistics

	n	Mean	Median	SD	Min	Max
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Children Enrolled</i>						
Number currently enrolled	2395	1.71	2	0.86	0	8
Years with at least one child enrolled	2392	5.12	4	4.01	1	24
<i>Educational Attainment</i>						
High School Diploma	2397	0.11				
Associate's	2397	0.13				
Bachelor's	2397	0.44				
Master's	2397	0.24				
Specialist or Professional	2397	0.02				
Doctorate	2397	0.06				
<i>Faith Identity</i>						
Broadly "Christian"	2397	0.19				
Broadly "Evangelical"	2397	0.13				
Broadly "Protestant"	2397	0.09				
Non-denominational	2397	0.33				
Specific Christian denomination	2397	0.32				
Non-Christian	2397	0.01				
Not sure	2397	0.02				
<i>Demographics</i>						
Male	2322	0.25				
<i>Race/Ethnicity</i>						
White	2265	0.89				
Nonwhite	2265	0.13				
Age	2378	43.80	43	7.16	26	78
Married	2351	0.93				
Homogamous	2179	0.76				
<i>Household Income</i>						
< \$25,000	2050	0.03				
\$25,001 to \$50,000	2050	0.06				
\$50,001 to \$75,000	2050	0.10				
\$75,001 to \$100,000	2050	0.16				
\$100,001 to \$150,000	2050	0.26				
\$150,001 to \$200,000	2050	0.17				
> \$200,000	2050	0.23				

Table 2. Parents self-reported satisfaction with child's school

	<i>n</i>	Mean	Median	SD
	(1)	(2)	(3)	(4)
Your child's school	2397	4.21	4	0.94
The value you receive for the tuition you pay	2397	3.98	4	0.94
The spiritual formation at your child's school	2397	4.14	4	0.86
Your child's teachers	2397	4.20	4	0.85
The education your child is receiving at school	2397	4.20	4	0.81
How likely are you to recommend your school to a friend or family member?	2397	4.37	5	0.88
<i>Overall parental satisfaction</i>	2397	4.18	4.33	0.71

*Notes.* Parents responded to each item on a five-point Likert scale: 1 - Very dissatisfied; 2 - Dissatisfied; 3 - Neither satisfied nor dissatisfied; 4 - Satisfied; 5 - Very satisfied.

Table 3. Which of the following statements best describes your understanding of a biblical philosophy of Christian education?

	Parents		Teachers		Admins (%)
	n	%	US (%)	Int'l (%)	
	(1)	(2)	(3)	(4)	
Great Commission	204	8.5	24.4	48.0	25.9
Great Commandment	142	5.9	6.6	21.2	6.5
Partnership with Parents	1969	82.1	66.0	24.0	62.9
Other	82	3.4	6.7	6.7	4.7

*Notes.* Data for parents come from current conjoint experiment. Data for teachers and administrators come from same dataset, as reported by Johnson & Lee (2023a; 2023b).

Table 4. From the following reasons, please rank the top reasons you chose this school for your child.

	% 1st	% 2nd	Avg. Rank
	(1)	(2)	(3)
Spiritual Formation	63.3	15.1	1.9
Academics	12.4	28.5	3.3
School Culture	13.2	26.1	3.4
Peers	4.5	13.6	4.4
Safety	3.7	8.6	5.1
Programs	1.3	2.8	5.9
Discipline	0.7	3.6	6.1
Athletics	0.2	0.8	7.6
Professional/Vocational Opportunities	0.7	1.1	7.4

Table 5. Possible attribute values in the parental school choice experiment

---

Academic quality	Below the level of current school, comparable to current school, above the level of current school
Spiritual formation	Below the level of current school, comparable to current school, above the level of current school
Athletics/extracurriculars	Below the level of current school, comparable to current school, above the level of current school
Tuition	10% lower than current school, same as current school, 10% higher than current school

---



Table 6. Average marginal component effects (AMCEs)

	$\beta$	SE	$p$ -value
	(1)	(2)	(3)
<i>Academic quality ("Comparable" omitted)</i>			
Below current school	-0.28	0.01	< 0.001*
Above current school	0.07	0.01	< 0.001*
<i>Spiritual formation ("Comparable" omitted)</i>			
Below current school	-0.32	0.01	< 0.001*
Above current school	0.08	0.01	< 0.001*
<i>Athletics/extracurriculars ("Comparable" omitted)</i>			
Below current school	-0.11	0.01	< 0.001*
Above current school	0.01	0.01	0.059
<i>Tuition ("Same" omitted)</i>			
10% lower than current school	0.03	0.01	< 0.001*
10% higher than current school	-0.11	0.01	< 0.001*
Constant	0.54	0.01	< 0.001*
$N$ observations	22266		
$N$ respondents	7422		
$F$ -statistic	1035.43		
Adjusted $R$ -squared	0.271		

Note. Asterisks indicate statistical significance, \*  $p < 0.001$ .

Figures

Fig. 1. Marginal means by level of enrolled children

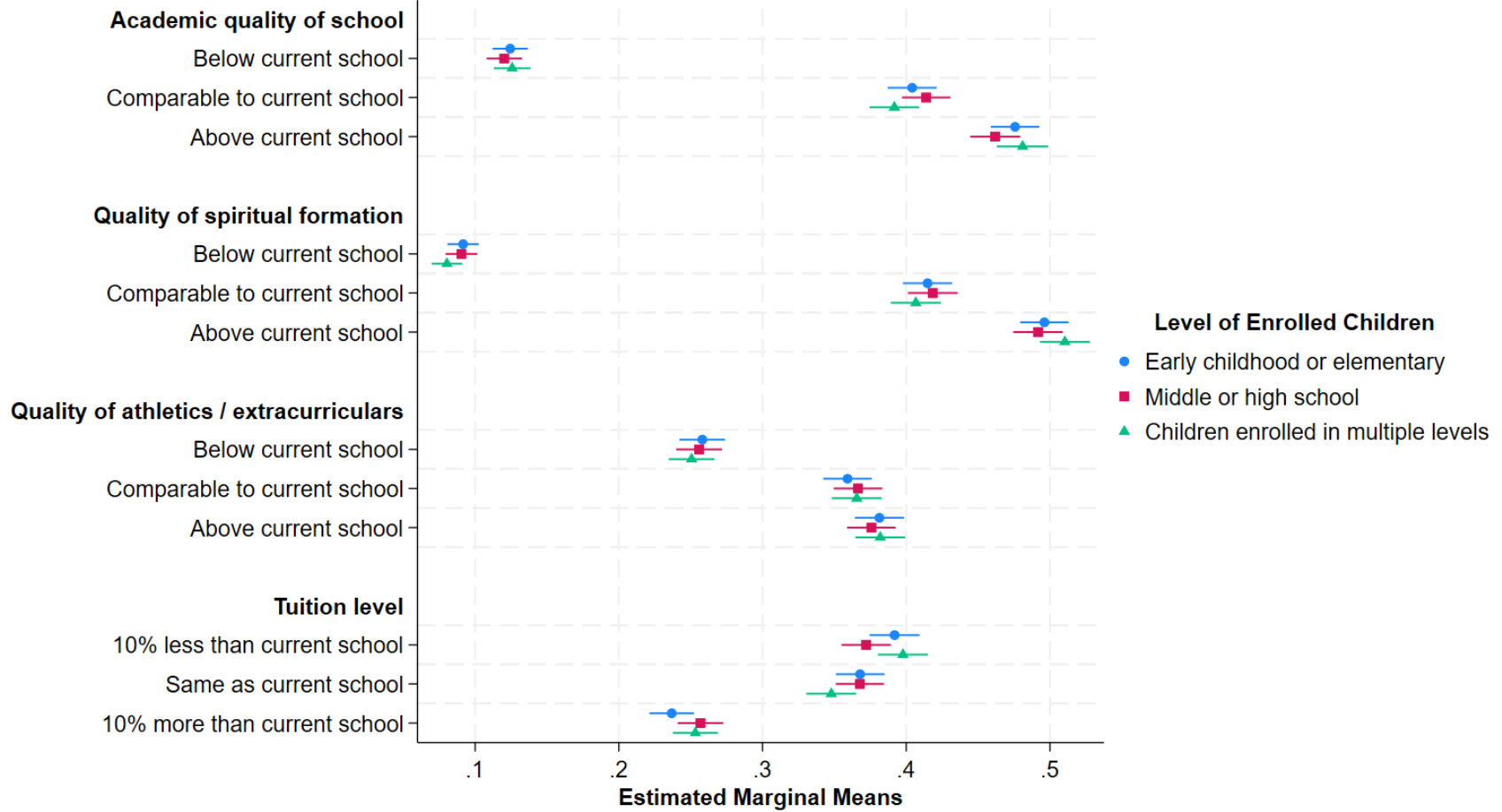


Fig. 2. Marginal means by reason for choosing school

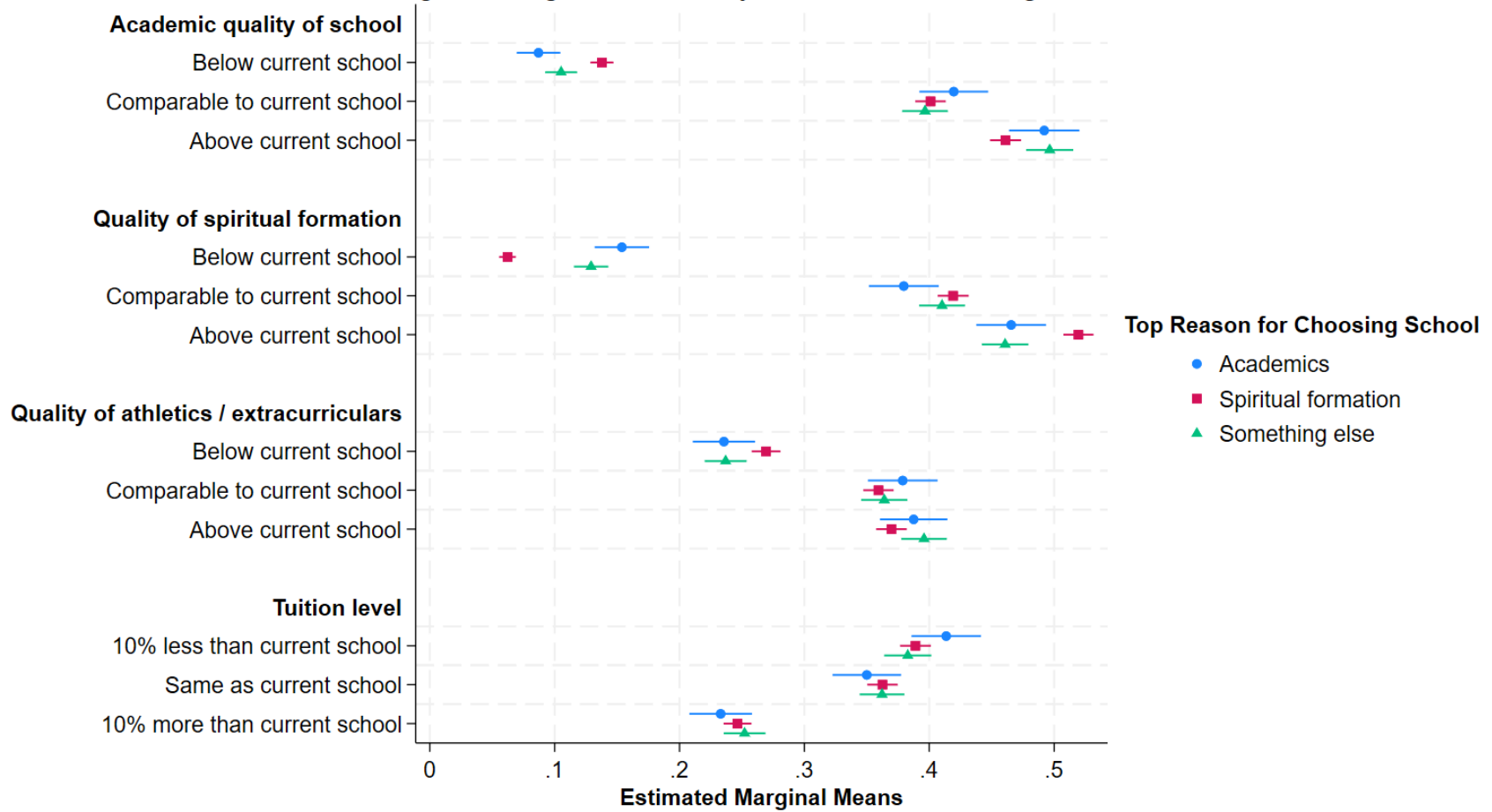


Fig. 3. Marginal means by parent's education

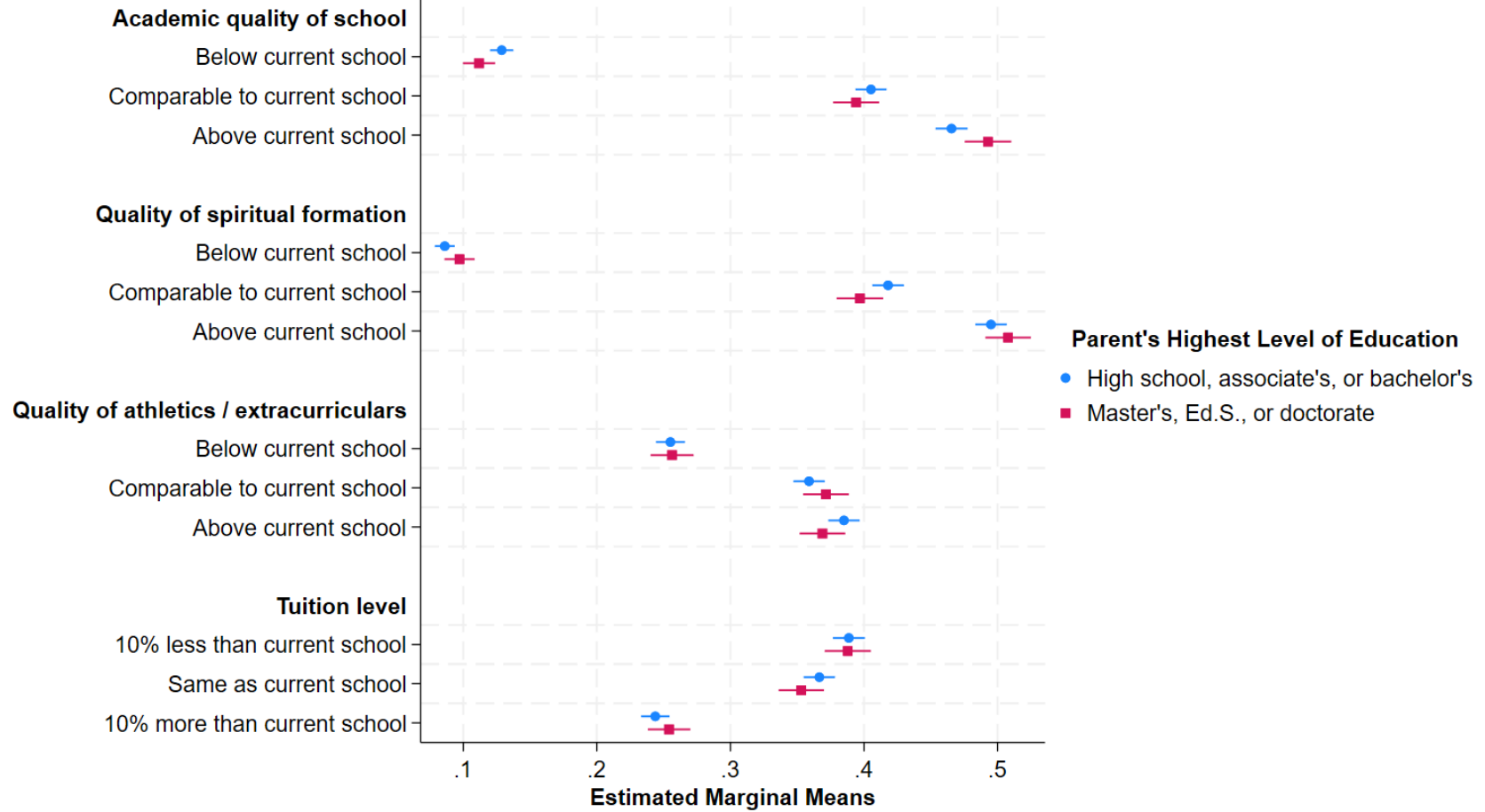


Fig. 4. Marginal means by household income

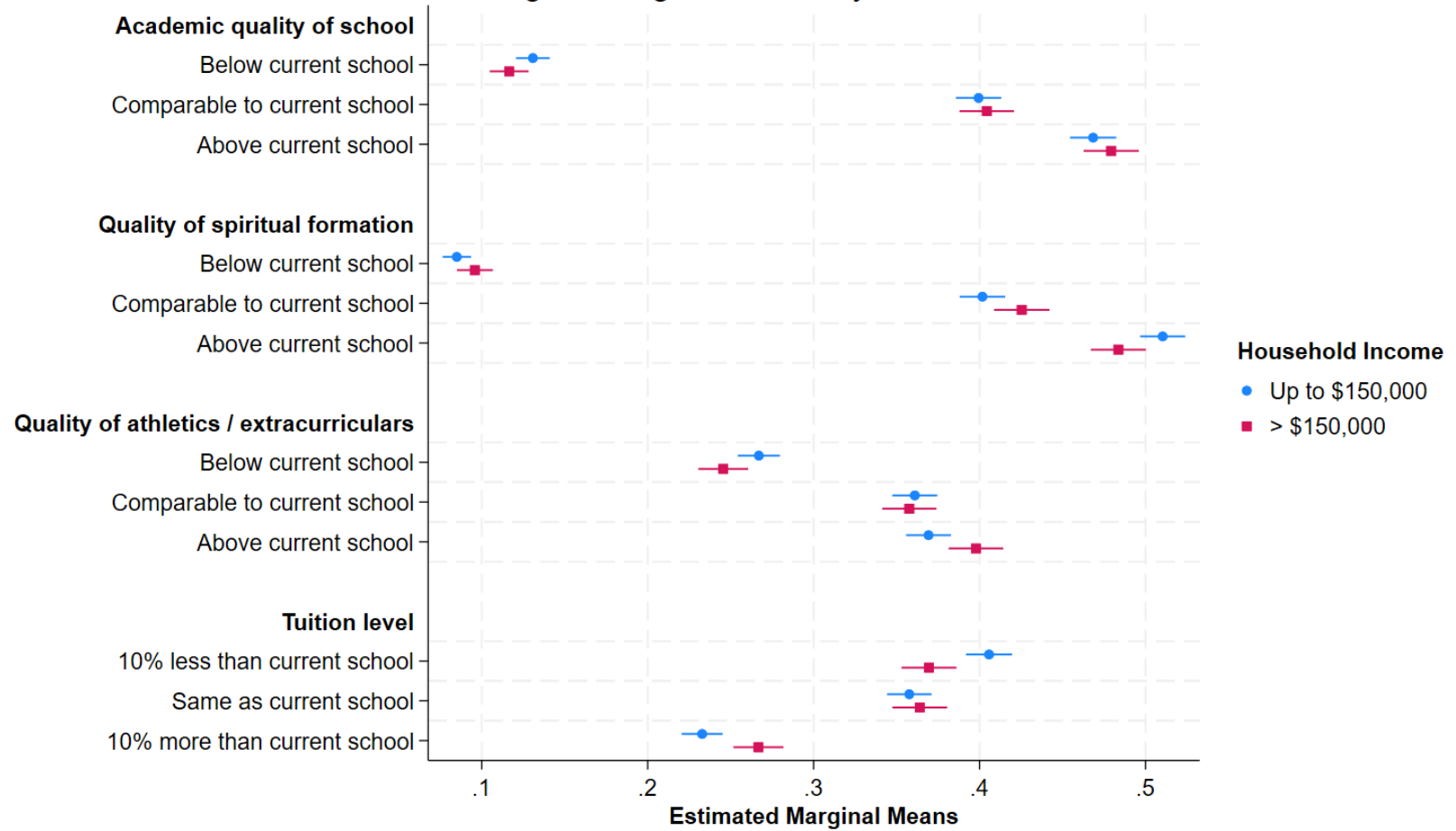


Fig. 5. Marginal means by parental satisfaction

