Has *Endrew F.* improved the chances of proving a FAPE violation under the Individuals with Disabilities Education Act?

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We attempt to determine empirically what effect the Supreme Court’s *Endrew F. v. Douglas County School District* decision has had on case outcomes where parents challenged the substantive adequacy of a special education program offered to their child. To determine *Endrew F.*’s impact, we contrasted 108 FAPE claims decided in federal district courts before *Endrew F.* to 80 similar claims made by parents in the post-*Endrew F.* era but commenced prior to issuance of *Endrew F.*, using FAPE violation versus no FAPE violation as the dependent variable. Applying conditional logistic regression to account for circuit fixed effects, we found no empirical support for a more favorable climate to plaintiffs following the ruling.

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In a much anticipated decision delivered on March 22, 2017, in Endrew F. v. Douglas County School District, R.E., the U.S. Supreme Court ruled unanimously in favor of a higher standard of education for children with disabilities under the Individuals with Disabilities Education Act (“IDEA”) than the Court had applied previously using the 1982 precedent set by Board of Education v. Rowley. Endrew F. was the first U.S. Supreme Court case addressing the substantive standard for a Free Appropriate Public Education (“FAPE”) under the IDEA since Rowley. Advocates and parents contended the decision dramatically expanded the rights of special-education students in the United States, anticipating that this would empower parents as they advocate for their children in public schools.

Without overruling Rowley, Endrew F. appeared to establish a more rigorous standard for program adequacy than the interpretations of Rowley applied by some U.S. Courts of Appeals prior to the Endrew F. decision. However, subsequent research based on affirmance rates by federal courts of state agency decisions suggest that Endrew F. may not have changed the substantive standard for program sufficiency in any material way. For example, a comparison of case outcomes in state administrative proceedings rendered pre-Endrew F. under the Rowley standard with outcomes from subsequent appeals in the federal courts using the new standard does not appear to provide any supporting evidence for the widely held contention of a more favorable climate for plaintiffs in such cases.

Here, we investigate this same general question but using inferential methods rather than relying on aggregate statistics. We hypothesized that FAPE claims initiated prior to Endrew F. would have different success rates for plaintiffs depending on whether the cases involved were ultimately decided after Endrew F., controlling for selection effects that might ensue following a legal change. Our findings are consistent with corollary research and we discuss possible reasons for our result as well as potential legislative and regulatory changes that might better effectuate the standards set out in the Endrew F. decision.

Background

The Individuals with Disabilities Education Act (IDEA) is a federal statute, considered to be the “bill of rights” for the education of children with disabilities. Under this Act, public schools receiving federal financial assistance must provide a free and appropriate education (“FAPE”) to students with disabilities. A FAPE is comprised of “special education and related services” tailored to meet the student’s individual needs while the mechanism for delivering a FAPE to the student is the Individualized Educational Program (“IEP”), “a detailed written document which describes the students’ educational goals for an academic year and establishes a plan to achieve those goals.” In 2017-18, 13.7 percent (6.964 million) of all public-school students received special education services under the IDEA. Among these students, 33.6 percent had specific learning disabilities, 19.5 percent had speech or language impairment, 14.4 percent had other health impairments, 10.2 percent had autism, and around 1.1 percent suffered from a hearing impairment.

IDEA grants states limited discretion to establish procedures for review of complaints where parents assert their child has been denied a FAPE, and state procedures must in turn conform to IDEAs requirements. Where parents challenge the adequacy of their child’s special education program, IDEA requires them to first exhaust state created administrative procedures before seeking relief in federal or state court. If the parents disagree with the
agency’s final determination in favor of the school district, they bear the burden to show that the administrative decision was wrong.14

Only two cases concerning the issue of FAPE have reached the level of the Supreme Court, one involving a deaf student15 and another involving a student with autism.16 Since 1982 the guidepost for FAPE determinations has been Bd. of Educ. v. Rowley.17 Rowley requires two questions to be answered in determining whether a FAPE has been offered: (1) whether the district complied with the Act’s procedural requirements, and (2) whether the IEP developed by those procedures is “reasonably calculated to enable the child to receive educational benefits.”18 If a district has met both the procedural and substantive requirements, it “has complied with the obligations imposed by Congress and the courts can require no more.”19

In looking back at Rowley, the Endrew F. Court stated that FAPE would generally require an IEP “reasonably calculated to enable the child to achieve passing marks and advance from grade to grade,”20 concluding that the FAPE requirement had been met in that case.21 However the Court declined “to establish any one test for determining the adequacy of educational benefits conferred upon all children covered by the Act.”22 (referring to the IDEA). Thus Rowley left states with wide scope for interpreting how to ensure FAPE requirements were met.

**Endrew F. v. Douglas County School District, R.E. I**

On September 29, 2016, the U.S. Supreme Court agreed to review a Tenth Circuit decision in Endrew F.23 The case was argued before the Court on January 11, 2017, and submitted for decision on that date. At issue was whether the District violated the IDEA by failing to provide the student with a FAPE. In view of the loose framework set by Rowley, the Court was required to choose from a range of options offered by the lower courts, the Department of Justice, and the parties to the litigation. Prior to Endrew F., six of the U.S. Circuit courts had applied a “merely more than de minimis standard when considering educational benefit,”24 the Tenth Circuit from which Endrew F. arose being one of them.

The original plaintiff attended a public school in Douglas County, Colorado, from preschool through fourth grade, subject to IEPs that his parents accepted.25 After the student had a difficult fourth-grade year, however, the parents decided that the IEP was inadequate. They objected that the goals being set for their child’s fifth-grade year had not been progressed.26 The parents then transferred the student to Fireside, a private, autism-oriented school, where he reportedly proceeded to thrive,27 and sued the school district for reimbursement.28

In contrast to Endrew F. and Rowley, the Endrew F. Court observed:

> [In *Rowley*, the Court] had no need to provide concrete guidance with respect to a child who is not fully integrated in the regular classroom and not able to achieve on grade level. That case concerned a young girl who was progressing smoothly through the regular curriculum. If that is not a reasonable prospect for a child, his IEP need not aim for grade-level advancement. But his educational program must be appropriately ambitious considering his circumstances, just as advancement from grade to grade is appropriately ambitious for most children in the regular classroom. The goals may differ, but every child should have the chance to meet challenging objectives.29

While this judgement fell short of prescribing any new formula, Endrew’s F’s FAPE standard seemed to go beyond the merely “more than de minimis” test applied by the Tenth Circuit.20 Yet the Endrew F. Court did not overrule *Rowley*; it kept current Supreme Court law intact.21

Thus, in the context of the current study, while we expected to find empirical evidence of a legal change in the direction of plaintiffs suing school districts for FAPE violations based on the *Endrew F* decision, the magnitude of any such impact was much less certain. The Court emphasized the case-specific nature of

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17 Rowley, 458 U.S. at 176.
18 Id. at 203. Under Rowley’s substantive prong the schools must provide “access to specialized instruction and related services which are individually designed to provide educational benefit to students” (Id. at 201) and “personalized instruction with enough support services to permit the child to benefit educationally from that instruction” (Id. at 203).
19 In another part of the decision the Court indicates the program offered must be “sufficient to provide some educational benefit to students with disabilities.” (emphasis added).
20 Endrew F., 137 S.Ct., at 996.
21 Id.
22 Id. at 991
25 Endrew F., 137 S.Ct. at 996.
26 Id. ("parents arguing that Endrew's IEPs largely carried over the same basic goals and objectives from one year to the next, indicating that he was failing to make meaningful progress toward his aims").
27 Id. at 997.
28 Id.
29 Id. at 1000-1001.
30 See, Terry Jean Seligmann, *Flags on the Play: The Supreme Court Takes the Field to Enforce the Rights of Students with Disabilities*, 46 J.L & EDUC. 479, 490 (2017) (noting that the Supreme Court labeled its standard as "markedly more demanding" than the District Court's standard (internal quotation marks omitted) (quoting *Endrew F*, 137 S. Ct. at 1000). Thus, it seems the Court intended to put a stop to the tendency of some district courts to read *Rowley* as narrowly as possible.
establishing a FAPE for an individual student, requiring that the IEP “be reasonably calculated to enable a child to make progress in light of the child’s circumstances.” The “reasonably calculated” standard had been imported from the Rowley decision, and did not necessarily require all students to be offered an opportunity to achieve academic success and attain self-sufficiency.

**Method**

**Case Selection**

Original jurisdiction over FAPE violations is governed by U.S. District Courts after litigants have exhausted administrative remedies within the state where the district court is situated, with one judge responsible for the determination. Typically, the two parties involved in FAPE cases include the local school district and the parents or guardians of the student in question. The court first evaluates whether the FAPE standard was applied correctly in state administrative hearings. Judges at this level may also determine the type of relief, if any, a student is owed based on case law and guarantees contained in the IDEA.

Our own dataset was constructed from decisions in FAPE cases between May 2012 and November 2019. Each case was retrieved from the Nexis Uni database and included students classified under one of the disability categories recognized under the IDEA. Cases were obtained using the following search criteria: “IDEA” and “FAPE” and “ROWLEY or ENDREW F.” In addition, any decision that did not expressly determine whether the local educational agency provided a FAPE were excluded from the data base. Thus, for example, cases in which the court concluded the agency applied the wrong legal standard, and which were subsequently remanded for further proceedings, were not included in the dataset. Similarly, claims dismissed for failure to exhaust administrative remedies, or on grounds of statute of limitations, were excluded from our dataset because those decisions were not based on the adequacy of the IEP under FAPE legal standards.

To ensure a like-for-like comparison of votes, we employ a variant of the “straddle” approach. This entails identifying cases caught in the crosshairs of the legal ruling that is hypothesized to have induced a genuine legal change, even if that change is not directly observable from case outcomes. Our own implementation of this strategy involved using the administrative decision date of each case as a way of filtering out those cases that may have been litigated under a new set of assumptions; specifically, our rule was that cases to be compared on either side of the Endrew F decision all had to have originated in state administrative agencies prior to Endrew F. This left us with a total of 186 cases, of which 78 (40%) involved FAPE violations. 106 (57%) of these were decided before Endrew and 80 (43%) were decided after.

**Variable selection**

Our variable selection was also primarily motivated by the need to ensure a valid comparison of cases before and after Endrew. Because the circuit courts differed in their interpretation of what the Rowley required for a FAPE, we distinguished circuits based on a classification of the pre-Endrew F circuits from Richard D. Marisco. As such, we coded the pre-Endrew circuits in terms of an ordinal scale from 1-4 with “4” indicating those circuits with the most rigorous FAPE standard pre-Endrew F, and “1” indicating those with the least demanding standard pre-Endrew F.

Table 1 sets out our coding of the circuit predictor, which links each circuit’s FAPE standard to the corresponding Rowley standard based on the level of educational benefit each circuit interpreted the FAPE standard to require.

Even more recently, an alternative dichotomous categorization of the pre-Endrew F circuits was used by William Moran. This categorizes the Fourth, Seventh, Eighth, Tenth and Eleventh Circuits as having the generally weak standard and the First, Second, Third, Fifth and Sixth as having the generally strong standard, which is directionally consistent with Marisco’s ordinal
Table 1. Ordinal Rank of FAPE Standards by Circuit, Pre-Endrew F.

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<thead>
<tr>
<th>Rank</th>
<th>FAPE standard</th>
<th>Circuits</th>
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<tr>
<td>4</td>
<td>Meaningful benefit considering child's potential</td>
<td>6²</td>
</tr>
<tr>
<td>3</td>
<td>Meaningful benefit/access</td>
<td>1⁴, 2⁴, 3⁴, 5⁶</td>
</tr>
<tr>
<td>2</td>
<td>Benefit</td>
<td>9⁶</td>
</tr>
<tr>
<td>1</td>
<td>Some/more than trivial benefit</td>
<td>4⁶, 7⁶, 8⁹, 10⁶, 11⁶</td>
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That being said, what is generally regarded as a small effect, e.g., an odds ratio of 1.5, would not reflect the kind of legal change that we would consider particularly important in this context. For example, going from a FAPE violation rate of 40% before Endrew to 50% after Endrew (a change we have a low probability of detecting in this analysis) would not necessarily be particularly consequential, whereas going from a rate of 40% to 60% or higher (a change we have a high probability of detecting) would be a good deal more noteworthy. In short, we concluded that we have adequate statistical power to detect the kind of substantive change that was anticipated from the *Endrew* decision.

**Descriptive statistics summary**

Although we anticipated an increased rate of FAPE violations following *Endrew*, the descriptive statistics show that this actually fell following the *Endrew* decision (Figure 1).

One immediate possibility that occurred to us as a possible cause of this surprising finding was to distinguish between those cases involving autism specifically versus those that did not. Because autism cases tend to be quite complex, with multiple special services being provided, it might have been anticipated that, in the post-*Endrew* environment, parents would prevail more often because it would be more challenging for schools to satisfy the FAPE standards announced in *Endrew*.

However, the pattern of outcomes comparing autism versus non-autism, while arguably more consistent with prior expectations, at best provided weak evidence that *Endrew* induced an increase in the percentage of FAPE violations for similar cases (Figure 2). Specifically of the total 186 cases, 70 (38%) involved autism, 32 of which were ruled on before Endrew and 38 after. Of the 32 autism cases before Endrew the number for which

\[ P(Y = 1) \] from before Endrew \((p1)\) to after Endrew \((p2)\). We first estimate the approximate range of the effect size of *Endrew* \((\beta_1)\) that we should be able to detect based on the following parameter constraints: Of the total \(N = 186\) cases, 80 were decided after *Endrew*. As such, we specify our main predictor of interest, i.e., whether the case was decided before *Endrew*, \(X\), as a binary covariate following a binomial distribution with parameter \(\pi = 0.430\). Of the 106 cases before *Endrew*, 46 involved FAPE violations, so that under the null hypothesis of no legal effect, \(P(Y = 1, X = 1) = 0.434\). Assuming a Type I error rate \(\alpha = 0.05\), and a Type II error rate \(\beta = 0.20\), we computed the effect size detectable via a Wald test \((z = \frac{\beta_1}{SE(\beta_1)})\), obtaining a required effect size of over 2 (scaled in terms of an odds ratio \(\frac{p_2}{1-p_2} \frac{1-p_1}{p_1} \)). As such, our results to follow come with the cautionary note that our sample size and parameters imply a low probability of detecting small effect sizes. Only medium-to-large effect sizes are detectable with high probability.

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**Figure 1. FAPE violation rate before and after *Endrew* case at U.S. District Courts**

**Figure 2. Comparison of autism and non-autism FAPE violation rates**

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FAPE violations were found was 9 (28%) while, of the 38 autism cases after Endrew, the number involving FAPE violations was 12 (32%).

One other possibility was that differences between the circuits distorted the aggregate statistics. Recalling the circuit rank classification scheme described above we examined FAPE violations by each circuit group (Figure 3). Here, there was some weak evidence supporting the expectation that Endrew F would raise the rate of FAPE violations differentially according to circuit rank. We treat the percentages here with some caution particularly with respect to the data for the highest circuit rank group, which suggested a strong reversal in FAPE violations following Endrew. However, this category consists of a single circuit (the 6th), which had only five cases before Endrew F and two after. The rank 3 grouping had the largest number of cases with 63 cases before Endrew F and 40 after, with a slight increase in the FAPE violation rate following Endrew F. The most meaningful contrast from this descriptive summary is between that group and the next largest group (the rank 1 group), which exhibited a substantial drop in the percentage of FAPE violations following Endrew F. As such there was some limited evidence that circuits responded differentially to the Endrew F decision according to circuit rank. Never-the-less, it was still surprising that there was a drop in the FAPE violation rate in any of the circuit groups, regardless of rank.

**Statistical Model**

We employed inferential techniques to test if the Endrew F decision induced a genuine legal change. Given the strong possibility that circuits differed in their interpretations of Endrew F, one suitable inferential technique to apply is a conditional logit model, sometimes referred to as a “fixed-effects” logit, where the fixed effects in this context capture the different baseline propensities across circuit groupings to rule for a FAPE violation. Another way to conceptualize this approach is to consider the votes/rulings within each circuit group as matched case-control data with \(k_1\) : \(k_2\) matching, where \(i = 1, 2, \ldots, n\) denotes the independent units/groups (in our context, the circuit groups), \(k_1 = \sum_{t=1}^{T_i} y_{it}\) is the number of times the dependent variable takes the value 1 (i.e., a FAPE violation) in circuit group \(i\), and \(k_2\) is the number of times the dependent variable takes the value 0 (i.e., no FAPE violation). Here \(t = 1, 2, \ldots, T_i\) denotes the total number of observations for the \(i\)th circuit group, so that \(T_i = k_1 + k_2\). As such, for each circuit group \(i\), we observed \(k_1\)'s out of \(T_i\) observations. Of that particular number of FAPE violations observed, there were \(|k_1|\) other combinations of votes that could have been observed. The conditional likelihood within each circuit group \(i\) of observing the particular outcome sequence \(y_i = \{y_{it}, \ldots, y_{it}\}\) conditional on the number of “1’s” actually observed in the group is as follows:

\[
Pr\left(y_i \mid \sum_{t=1}^{T_i} y_{it} = k_{1i}\right) = \frac{\exp\left(\sum_{t=1}^{T_i} y_{it} x_{it} \beta\right)}{\sum_{d_i \in S_i} \exp\left(\sum_{t=1}^{T_i} d_{it} x_{it} \beta\right)}
\]

where \(d_i\) equals 0 or 1, indicating whether the vote \(t\) within the circuit group involved a FAPE violation or not, \(S_i\) is the set of \(|k_{1i}|\) hypothetical combinations of \(k_1\) ones and \(k_2\) zeros that could have been observed in that circuit group, while \(\exp(x_{it} \beta)\) links the linear combination of voting predictors \(x_{it}\) to a probability scale. The overall conditional likelihood is the product of like expressions for each circuit group. Within the context of maximum likelihood estimation, the computational task of estimation is to find values of \(\beta\) that makes the overall ratio of that product as large as possible given the observed outcomes \(y_{it}\) and \(d_{it}\) and observed predictor values \(x_{it}\). Chief of substantive importance among the latter, in the current context, is the binary predictor of whether the vote occurred pre- or post- the Endrew F decision.

Our primary rationale for adopting this approach is that we are interested in estimating the likelihood relative of a FAPE violation within each group – different circuit groups may have different thresholds of legal interpretation and therefore different propensities to rule for a FAPE violation. By isolating these “fixed-effects”, we can focus on the change within each circuit.
grouping, as distinct from its general threshold of interpretation. The flexibility of this approach also allowed us to specify different circuit grouping categorizations, including the option of treating each individual circuit as a single group of its own. None of the reported statistical tests to follow are compromised by any particular choice of group categorization.

Results

We present results here for a model with our main predictor of interest, the date of the *Endrew* decision, including also a control variable for autism cases, as well as an interaction term (“After ENDREW × Autism”) between the two in case the effect of *Endrew* differed depending on whether the case involved a student with autism or not (Table 2). The main predictor of interest—whether the case was decided before or after *Endrew*—was not statistically significant, and this was true regardless of whether the case involved autism. There is some evidence that cases involving autism were relatively less successful compared to non-autism cases prior to *Endrew*, but the overall rate of plaintiff success did not detectably rise even for autism cases. In short, the results provide no support for the contention the *Endrew* decision had any significant impact on case outcomes, regardless of whether the case involved autism or not.

Table 2. Ordinal Rank of FAPE Standards by Circuit, Pre-*Endrew* F

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<td>Err.</td>
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<td>0.60</td>
<td>-0.76</td>
<td>0.45</td>
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<tr>
<td>Autism</td>
<td>-0.80</td>
<td>0.23</td>
<td>-3.13</td>
<td>0.00</td>
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<tr>
<td>After ENDREW × Autism</td>
<td>0.46</td>
<td>0.58</td>
<td>0.80</td>
<td>0.43</td>
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Discussion

Our results are consistent with those of Moran and Zirkel while adding a more extensive quantitative and inferential basis to their conclusions. Although not referring to the “straddle approach,” Moran’s own method “entailed [studying] post-*Endrew* F appeals from pre-*Endrew* F IEP determinations” while separately analyzing other decisions that “lacked the same unique procedural history”. There, the key causal analysis centered on 83 decisions decided post-*Endrew* F involving reviews of lower court decisions determined pre-*Endrew* F. Of those, 18 involved FAPE denials, 6 of which also reversed the original decision. Although this was only 7.2% of the total 83 cases, it was one in three of the cases where a FAPE denial was found. This is still a substantially higher rate than the corresponding number from a different sample reviewing decisions that were initiated post-*Endrew* F. In that sample, 13 involved FAPE denials, only 3 of which (5%) reversed the original determination. It is therefore not clear from Moran’s results that *Endrew* F had no effect. In fact, the statistical trend seems consistent with the contention that *Endrew* F may have had some effect but pointing to a minor, perhaps inconsequential one.

Although Moran’s analysis also entails using cases with a common history in terms of being initiated prior to *Endrew* F, a causal analysis also requires consideration of the behavior of the appeals courts prior to *Endrew* F. Without this, there is no way of disentangling other confounding factors, e.g., if the appeals courts were already trending in one direction or the other. Further, the relatively small numbers of cases involved in Moran’s analysis would not have been sufficient for statistical inference techniques. Our own approach focused solely on District court decisions, allowing us to expand the dataset albeit not as much as we would have preferred ourselves.

An explanation for our own null finding remains elusive, especially in those circuits where pre-*Endrew* F FAPE standards were less rigorous than those established under the *Endrew* F regimen. Under Marisco’s analysis these less demanding jurisdictions included the Fourth, Seventh, Eighth, Tenth and Eleventh Circuits where one might have expected a significant change in judicial voting in a direction favoring the parents. Equally surprising was the fact that the outcomes in the cases involving autism were not more favorable for the parents than challenges on behalf of students with other disabilities, given that *Endrew* F itself involved a seriously impaired student with autism. Indeed, the *Endrew* F Court seemed to outline a specific road map on how to challenge IEPs in such cases.

Although *Endrew* F retained Rowley’s “reasonably calculated” standard to enable a student to make progress, it emphasized that the IEP must “be appropriate in light of the child’s circumstances.” *Endrew* F further required the reviewing court to examine whether the IEP contained sufficient “challenging objectives” and goals which were “appropriately ambitious,” considering the student’s unique abilities. However, Moran found that 87% of the

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43 We also estimated a model that included the party affiliation of the judge, but this variable had no statistically significant effect, and entailed a small drop in the number of observations because some judges had no party affiliation.

44 Moran, supra note 24, at 495.

45 Id.

46 The *Endrew* F Court stated: *Rowley* had no need to provide concrete guidance with respect to a child who is not fully integrated in the regular classroom and not able to achieve on grade level. That case concerned a young student who was progressing smoothly through the regular curriculum. If that is not a reasonable prospect for a child, the IEP need not aim for grade-level advancement. But the educational program must be appropriately ambitious considering the circumstances, just as advancement from grade to grade is appropriately ambitious for most children in the regular classroom. While the goals may differ, every child is supposed to have a chance to meet challenging objectives. *Endrew* F, 137 S. Ct. at 988, 1000.
decisions failed to expressly address each of the three specific IEP requirements in explaining their legal conclusions as to IEP adequacy.\footnote{Moran, supra note 24, at 518.}

For example, while the “reasonably calculated” language was used in 95.1% of the 142 cases Moran analyzed, only 30% of these cases invoked the phrase “appropriately ambitious” in the legal analysis, while merely 18% of the cases expressly referred to “challenging objectives.”\footnote{In connection with Endrew F the U.S. Department of Education has stated: “In rejecting the Tenth Circuit’s reasoning, the Supreme Court determined that, “[t]o meet its substantive obligation under the IDEA, a school must offer an IEP that is reasonably calculated to enable a child to make progress appropriate in light of the child’s circumstances.” The Court additionally emphasized the requirement that “every child should have the chance to meet challenging objectives.” Q & Questions and Answers (Q&A) on U. S. Supreme Court Case Decision Endrew F. v. Douglas County School District Re-1 (December 7, 2017).} Because lower courts ruled overwhelmingly in favor of the school districts on the substantive adequacy of the IEP without concurrently applying the “appropriately ambitious” and “challenging objectives” criterion, it is uncertain whether inclusion of these requirements in the courts’ analyses would have resulted in different case outcomes. But it remains a possibility that a general litigating failure to comply with the Supreme Court’s requirements may have perpetuated many of the problems that Endrew F was supposed to address.\footnote{It seems most likely the Endrew F Court considered “challenging objectives” and goals which were “appropriately ambitious” among the prongs necessary to find an IEP reasonably calculated “to enable a child to make progress in light of the child’s circumstances.”}

Finally, it may be the case that the limited success attained by the parents in challenging students’ IEPs was due to poor litigating strategy on the part of students’ advocates. The Fifth Circuit’s decision in \textit{E.R. v. Spring Branch School District}\footnote{909 F.3d 754 (5th Cir. 2018)} is instructive in this regard. There, the court refused to consider an appellate argument advanced by the parents’ attorney even though the attorney had raised the argument in the district court. This was because the advocates failed to brief the argument on appeal.\footnote{See, E.R. v. Spring Branch Indep. Sch. Dist, 909 F.3d 754, 15-16 (2018). The same principle will apply in arguments not briefed in the administrative proceedings or the district court.} Because the parents will ordinarily bear the burden of persuading the court about IEP error,\footnote{See, Schaffer v. Weast, 546 U.S. 49 (2005).} such considerations take on greater importance in the parents’ arsenal of tools in challenging the substantive adequacy of the IEP.

Our purposeful exclusion of cases that failed to make a specific FAPE determination limited the scope of our case coverage. For instance, where a case was remanded for proper application of the FAPE standard it was excluded from our dataset because we could not determine whether the ruling was pro-parent or pro-district. Likewise, cases settled during the administrative process or following an “appeal” to the district court could not be included in the data base for the same reason, which raises the possibility that our dataset was constructed from the relatively weaker cases that were not settled. This seems to us one of the more plausible counter-explanations to our null finding.

Another possible limitation of our study is that we did not distinguish between a student’s placement (regular class placement like \textit{Rowley}) verses special class placement (like \textit{Endrew F}). Although this is consistent with \textit{Endrew F}, there is a practical difference in the two situations. Mainstreamed students in cases such as \textit{Rowley} will have IEP adequacy measured by whether the document enables (at the time of its construction) the student to advance from grade to grade. In cases where students are educated in more segregated settings the FAPE analysis would be more complex in having to demonstrate appropriately ambitious programming and challenging objectives for an IEP where students receive multiple special services due to the severity of their impairments.

However, if our null finding is correct, then the only way to ensure compliance with Endrew F’s goals may be for the U.S. Department of Education to amend its regulatory language by requiring each IEP to state explicitly how (based on each student’s present level of performance in pertinent areas) the proposed IEP sets appropriately ambitious objectives and how those academic and other goals are challenging to the student. Local educational agencies would lose the benefit of the deference they receive from the courts where they failed to include such elements in their IEPs, thereby shifting the burden of proof to the school district. Moreover, where Congress or the Department of Education fails to act, individual states may have to set their own statutory or regulatory amendments to reinforce the direction in which the U.S. Supreme Court pointed.