IDEOLOGICAL AND LEGAL DETERMINANTS OF U.S. COURT OF APPEALS JUDGES' VOTING IN K-12 AUTISM REIMBURSEMENT CASES (1983 – 2016) UNDER THE INDIVIDUALS WITH DISABILITIES EDUCATION ACT

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Abstract

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The results of this study reveal the influence of (1) U.S. Court of Appeals judges' political ideology; (2) pivotal special education Supreme Court decisions' influence; and (3) Individuals with Disabilities Education Act (IDEA) of 1997 Amendments' influence on appellate judges' voting decisions impacting K-12 education autism tuition reimbursements between 1983 and 2016, using descriptive and inferential analyses with binary logistic regression as a statistical tool. Principal inquiries are:

1. Does U.S. Court of Appeals judges' political ideology (as measured by party of the appointing president or DW-NOMINATE Measure scores) influence their voting in whether to award tuition reimbursement under the IDEA in cases involving students with autism?
2. Are there differences in the power of party of the appointing president (Republican or Democrat) and DW-NOMINATE Measure scores (political conservatism or liberalism)

in predicting whether court of appeals judges' award tuition reimbursement in IDEA cases involving students with autism?

3. What influences do legal developments in IDEA 1997 Amendments exert on Court of Appeals judges' voting in IDEA tuition reimbursement cases involving students with autism?

The principal findings for this investigation are: (1) ideology, as determined by party of appointing president is an effective means to predict judges' voting in K-12 autism tuition reimbursement cases decided by U.S. Court of Appeals. The odds of a Democrat-appointed appellate judge voting in favor of K-12 tuition reimbursement for students with autism is significantly greater than a Republican-appointed appellate judge. (2) Judicial ideology, as determined by judges' DW-NOMINATE Measure score is an effective predictor of judges' voting in K-12 tuition reimbursement for students with autism; the odds of a pro-parent vote by a Democratic-appointed appellate judge is significantly greater than a Republican-appointed appellate judge. (3) Whether a tuition reimbursement for students with autism in the K-12 setting occurred before or after IDEA 1997 Amendments is an effective predictor of appellate judges' voting in favor of the plaintiff, whether measured within a model utilizing party of the appointing president or DW-NOMINATE Measure scores as an ideological predictor. The odds are significantly greater for a U.S. Appeals Court judge to vote in favor of tuition reimbursement after the IDEA 1997 Amendments.

Key words: autism, tuition reimbursement, Individuals with Disabilities Education Act (IDEA), judicial ideology, logistic regression

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IDEOLOGICAL AND LEGAL DETERMINANTS OF U.S. COURT OF APPEALS JUDGES' VOTING IN K-12 AUTISM REIMBURSEMENT CASES UNDER THE INDIVIDUALS WITH DISABILITIES EDUCATION ACT (IDEA)

CHAPTER 1: INTRODUCTION

The results of this study reveal the influence of (1) U.S. court of appeals judges' political ideology and (2) legal developments, including seminal Supreme Court decisions and Congressional amendments to the Individuals with Disabilities Education Act ("IDEA") on judges' voting in K-12 special education reimbursement cases involving children with autism arising between January 1983 and August 2016, using binary logistic regression as the primary statistical tool.

Investigations dedicated to advancing the understanding of legal institutions and law have broadened our understanding of the impacts of judicial decision making. Researchers have investigated various ideological, legal, and interactive factors among judges which affect behaviors of judges across a wide-range of conflict categories (Cross, 2007; Epstein, Landers, and Posner, 2013; Martin, 2003). A wide array of studies has emerged which is focused on K-12 education litigation stemming from interpretation of provisions under the Individuals with Disabilities Education Act (IDEA) (Zirkel, 2012). Many of the studies reviewing the complaints filed on behalf of students with autism have focused on actions of hearing officers and methodologies employed in the educational setting (Yell & Drasgow, 2000). Studies have used legal, strategic, and attitudinal modeling to better understand judicial behaviors (Brenner, 2000; Cameron, Segal, and Songer, 2000; Clark, 2009; George, 1999; Martin, 2003). Judicial opinion within all levels of our court's system shapes national implementation of the laws of our land. It is therefore of no surprise that ideological, legal, and other influences on judges' voting are a

matter of scrutiny. An overlapping question that persists across research studies examining determinants of judge votes is how do judges decide cases?

For approximately 50 years, political scientists have been examining court documents to empirically examine voting patterns of judges (Epstein and Jacobi, 2010). A great deal of this body of judicial research has been devoted to examining the ideology of judges as determinant of how votes are cast. (Edwards, 2003, p. 1689) admits there is "no direct, immediate way to study fully the effects of collegiality on judging" and that there are "structural and ethical impediments to data gathering… limit[ing] empirical analysis of adjudication." The results of this study contribute to this body of research and examines the voting habits of judges between 1983 and 2016 and their decisions in tuition reimbursement cases heard in U.S. Court of Appeals on behalf of students who are autistic and their parents.

The Individuals with Disabilities Education Act (IDEA)

In the 1970s efforts intensified to have Congress enact legislation ensuring children with disabilities would receive an adequate education to meet their unique needs. According to Weber (2012) the most important federal initiative in this regard is the Individuals with Disabilities Education Act (IDEA), originally enacted under the name Education for All Handicapped Children Act (EAHCA) in 1975.

Since IDEA's enactment there has been a noticeable increase in the number of students receiving services under that law. With the rapid growth in the number of students identified with disabilities between the ages of 3 and 21 years who meet eligibility requirements of IDEA, states are increasingly challenged to implement programs which meet IDEA's requirements while remaining within budgetary and human resource considerations.

According to Zirkel (2011), autism litigation has seen a disproportional increase among published court decisions. Cases filed on behalf of students with autism comprised one third of the total decisions in the period between 1993 and 2006, with primary focus on discerning the provision to students with autism, a free appropriate public education (FAPE) and least restrictive environment (LRE) under the Individuals with Disabilities Education Act. It is reasonable to be concerned that IDEA's evolving policy requirements must be interpreted by judges within the multi-tiered court system wherein parents challenge the adequacy of their child's educational program. Idstein (1993) reported that for parents, it has grown increasingly more difficult to have their concerns addressed regarding problems with IEPs and schools do little more than an "adequate" job of teaching—likening their experience to "swimming against the main stream." The permutation of judicial doctrine affects outcomes for challenges by parents requesting reimbursement of services which they have secured on behalf of their autistic child outside the public-school venue. The voting habits of judges are an area meriting consideration and research on behalf of all parents of disabled children. Further, understanding factors influencing appellate judges' responses to lower courts' interpretations of IDEA is of significant interest due to the long-term impacts on policy development affecting educational outcomes for students with autism.

Students with IDEA covered disabilities. Understandably, public schools' meeting educational mandates for our nation's students, as interpretation of IDEA's requirements evolve, presents specific challenges for public school administrators. Foremost among these concerns is meeting the individual needs of students eligible for services under the IDEA. Categorically, the number of students with disabilities rose to 5.83 million in the fall of 2014 of which 509,820 were identified as autistic (Off. of Special Educ. and Rehabilitative Serv's., 2008; U.S. Dep't of

Educ., Office of Special Educ. and Rehabilitative Services, Office of Special Educ. Programs, 2014). The report further indicates that a national increase of 165% was realized between 2005-06 and 2014-15 school years for students on the autism spectrum being served through IDEA Part B.

Students with Autism Spectrum disorders. To further clarify, based on the Center for Disease Control and Prevention's Autism and Developmental Disabilities Monitory (ADDM) Network, the prevalence for children identified with autism is currently estimated to be one in 68 children or 14.6 per 1,000 (Christenson, et al., 2012, April 1) or approximately 510,000 children served in public schools. These are likely to be underestimates considering that a significant number of students thought to be on the spectrum are not included in these statistics. Specifically, those identified as having Asperger's Syndrome, many of whom are considered high- to very high-functioning, are served through general education with little or no special education support but may be eligible for services under the IDEA. Therefore, by not receiving special education or other services funded under IDEA-B, these students are not tracked within the public schools for federal reimbursement and thus are not included in most of the available statistics (Christenson, et al., 2012, April 1). According to a 2013 National Survey of Children's Health, the prevalence of autism is one in 50 which may be a more accurate accounting of individuals on the full spectrum (Blumberg and Luke, 2012).

Understanding the nature of autism is challenging. Symptoms vary in severity and complexity for individuals diagnosed with autism spectrum disorder, though social impairment, communication impairment, repetitive behaviors, and restricted interests are commonly observed among those children identified as autistic (American Psychiatric Association, 2013). Chedd and Levine (2012) remind that individuals with autism range from severe intellectual disability to

highly gifted and superior intelligence with competence in one or more areas or subjects. Moreover, many parents of children with autism have a basis for additional concerns since approximately 10% of individuals diagnosed with autism have a comorbidity of at least one other disability (Cohen, et al., 2005).

For public schools, programming and servicing students with autism can be a huge challenge. Establishment of an effective treatment plan with personnel trained in therapeutic interventions for students with autism is problematic when one approach or strategy cannot be uniformly used or generalized to serve a population exhibiting such diverse needs. According to the Department of Education's Office of Special Programs, no specific course of treatments over a child's lifetime can be said to be most effective (National Research Council Comm. (NRCC) on Educational Interventions for Children with Autism, 2001). The NRCC did however, identify components contributing to the efficacy of appropriate programming: 1) upon diagnosis of autism spectrum disorder, immediate entry into a program; 2) weekly treatment of 25 hours minimum; 3) treatment inclusive of family training to increase in home support; 4) reduced student-to-teacher ratios during instruction with 1:1 preferred; 5) sufficient adult interaction to assure meeting of individual goals; and 6) programmatic assessments. To date, only studies utilizing the Lovaas method have met evidence-based practice (EBP) standards that show a statistically significant increase in IQ scores in students with autism receiving treatment (Chedd and Levine, 2012). Further, they reveal that therapies such as Applied Behavior Analysis (ABA), which analyzes observable behaviors to determine their function and relationship to the environment, are necessary to improve socially significant behaviors. In a comprehensive summary of research between 2006 and 2015 by the National Center for Special Education on autism spectrum disorder conducted, research reports that much of autism studies remains

focused on improving outcomes. This primarily includes early identification and early enrollment in services to bridge social and communication gaps which are central symptoms of ASD.

IDEA provisions. It should be noted that special interest groups' recommendations for treatments and interventions for individuals identified with autism may be more aggressive than those legally required under IDEA, and advocacy groups seek to optimize student outcomes rather than providing for IDEA's minimum floor of opportunity as provided under the *Rowley* "benefit" test (Seligmann, T.J., 2005, p. 5). With such diversity in opinion in levels and types of educational programming to best meet the needs of students with autism, disagreements over decisions made within programmatic planning among committee members is understandable.

Though the legal system provides for procedural safeguards for parents seeking resolution of conflicts that result from disagreements over program and placement, pursuit of remedy through the courts has had mixed results (Seligmann, 2012). Where parents contend that a FAPE is denied within public school settings, parents seeking specialized intervention services tailored to meet the unique needs of students with autism often turn to private schools and supplemental service contractors to meet these needs. These private plans are constructed to provide educational benefit for their child that parents believe to be unavailable within the public school. Unfortunately, parents of children with autism who have sought reimbursement from public schools for private educational expenses, residential schools, or research-based interventions requiring specially trained teachers, have experienced mixed outcomes for their efforts (Seligmann, 2012). With a parent's unilateral placement of their autistic child in a residential treatment facility, a district may be found responsible for an annual bill of $100,000 or more (Boekman, 1998; Pedi, 2014). This is a practical example of the type of tuition

reimbursement challenges arising under IDEA. In the absence of empirical or theoretical reason to believe otherwise, it is logical to believe that the number of legal challenges on behalf of students with autism—especially those requiring highly specialized and specifically structured treatments--is likely to be proportional to the increases in numbers of students with autism taught in public education. Providing insight for parents seeking appropriate educations for their autistic child and the public schools that are responsible for provision of a FAPE is of high priority.

Legal concerns. Although there appears to be a growing body of appellate decision involving IDEA reimbursement cases, research has not determined what factors influences appellate judges' votes in cases where parents have sought reimbursement. This is especially true with respect to how ideological and legal factors contribute to judges' voting in these cases.

Understanding the nature of appellate judges' decisions as well as analyzing potential trends and outcomes within this growing number of autism reimbursement cases can inform not only parents seeking avenues for legal remedy and reimbursement, but also lawyers prosecuting and defending in these cases as they advise their clients. Moreover, it can guide school districts as to ways in which they may be legally vulnerable and in finding ways to enhance their compliance with IDEA's requirements. This study further can provide valuable information to the judges presiding over autism reimbursement cases as well. One cannot discount the sheer quantity of autism appellate cases having been heard to date, nor the need for understanding the evolution of judges' decisions within these cases.

Study Database

In a preliminary search of the Westlaw database, 131 tuition reimbursement cases litigated on behalf of students with autism were published within Westlaw recording decisions on behalf of the U.S. Appellate Court system between the years of 1983 and 2016. A study by Imber and Gayler (1988) found that in looking at civil litigation between 1968 and 1978, the number of trial court cases appear proportional to appellate court cases. Imber and Gayler further extended the trend analyses to propose that the direction and rate of change of the frequency of education cases published within the Westlaw database could be extended to examine the ratio of published and unpublished documents. They found that across the twelve jurisdictions, the correlation coefficient between trial courts and appeal courts was .89. Competition in online services such as West's Westlaw and Mead's Lexis services has resulted in more published court decisions. Based on this projected ratio, it is reasonable to assume that as many as 147 cases were potentially filed, though not published, on behalf of students with autism. Assembling a pool of 131 cases—as available within Westlaw's database—provided opportunity for analyses of 339 judge votes for this study.

Examining court records to identify trends and patterns has proved to be informative for gaining perspective on behaviors of judges. Epstein, Landers, and Posner (2013) remind that by understanding our courts' judges more completely, defendants and their lawyers can more efficiently navigate our legal system to litigate or settle cases to avoid costly court time. Additionally, the deepening understanding of judges and their motives may inform and reform judicial training. In order that the judgment of courts may be properly administered, it is vital that attorneys and judges gain knowledge providing insight into factors controlling the decisions and decision makers within our court system.

Judicial Ideology

There are many studies exploring factors affecting the decision-making processes of judges. Ideology, as used within this paper, is the personal view influencing behaviors and decisions of a judge. Chemerinsky (2003) explains that judicial ideology includes "the individual's philosophy of judging and constitutional interpretation" as well as position on "disputed legal questions" (p. 621). Epstein, Landes, and Posner (2013) found that the appointing president's political party affiliation, is a useful *ex ante* proxy for judges' ideology. The *ex ante* ideology—that is ideology that is present at the time of appointment of a judge—has often been a strong predictor of judges' decisions while on the bench.

While there has been some debate among legal scholars as to the value of using ideology determinants when appointing judges, Chemerinsky (2003) affirms that "no one seems to deny that it is completely appropriate for the President to consider ideology in making appointments" (p. 624). Further, Senators, as the other decision-making group in the two-part judge affirmation process, regularly "use ideology as a basis for evaluating presidential nominees for the federal bench" (p. 624). It is therefore no surprise that researchers most commonly have used the party of the appointing president to "identify the ideology of a judge before he starts hearing cases" and "to explain judicial votes" (Epstein *et al.*, 2013, p. 175).

However, using the party of the appointing president as a measure of ideological predisposition of a judge may be a coarse indication of judges' actual voting propensities. One must recognize that as within any spectrum, Presidents fall along a continuum ranging from ultra-Conservative to a full range of Liberalism, with slight fluctuations highly dependent upon external influencers within their respective parties (Epstein *et al.*, 2013, p. 71). Ashenfelter, Eisenberg, and Schwab (1995) advise that "it is not self-evidently disturbing when the judge's

worldview (as revealed by party affiliation and other variables) dominates over some competing sources of decision." To codify the nature of judges' ideologies for this study, the afore mentioned "ideological proxies"—the party of the appointing president, and judges' DW-NOMINATE Measure scores were used. On the party of the appointing president measure, a judge was coded as "liberal" if appointed by a Democratic president and coded "conservative" if appointed by a Republican president. This dichotomous assignment by party affiliation served as an independent variable.

Judges' DW-NOMINATE Measure score were calculated by assigning to the judges the score of the home-state Senator where there is one same party senator as the appointing President; in the case where there are two Senators from the same party, the mean of the assigned DW-NOMINATE Measure scores for the two was used. Where there was no same party Senator as that of the President, the President's DW-NOMINATE Measure score alone was used.

Investigation of judges' voting patterns within autism tuition reimbursement cases may reveal an alignment to either liberal or conservative ideologies.

While it is not the goal of this study to provide an exhaustive exploration of judicial behavior, it is an attempt to investigate the predictive nature of several independent variables including party of the appointing president and DW-NOMINATE Measure scores in autism tuition reimbursement appellate cases. This exploratory study further seeks to better understand not only partisan ideology effects, but also legal predictors as manifest by case law and changes in the IDEA on court of appeals judges' voting.

Case Decision Precedence

Precedential decisions stemming from Supreme Court cases on key issues affecting educational reimbursement decisions were initially evaluated for potentially shaping a judge's vote. Three critical U.S. Supreme Court cases were targeted to serve as potential independent variables, as well and being used within the exploratory study as having possible influence: *Hendrick Hudson Dist. Board of Education v. Rowley* (1982), *Burlington School Community v. Massachusetts Department of Education* (1985), and *Florence County School District Four v. Carter* (1993). The exploration of these time frames enabled an early comparison of ideological versus legal effects on judges' voting.

The Rowley Impact

The Rowley decision of 1982 was a landmark case, representing the first special education decision issued by the U.S. Supreme Court. *Hendrick Hudson District Board of Education v. Rowley* (1982) concluded that school districts must provide a "basic floor of opportunity to disabled students, not a potential-maximizing education" (Rowley, 458, U.S. 176, 1982). Amy Rowley—a student possessing only residual hearing and identified as hearing disabled—was provided by the school district, a frequency modulation (FM) hearing amplification system, instruction by a tutor for the deaf, and speech and language services. She was educated in a general education kindergarten class and was noted as being very competent at lip reading. Her parents, also deaf, had requested that she receive support of a sign language interpreter within her educational setting. The local school board denied the parent's request because Amy's academic progress was deemed "adequate" under her current individual education plan (IEP). Following adjudicative dispute resolution provisions under IDEA, her parents appealed the decision believing that though Amy was performing well, was not living up

to her potential. In their opinion, she was not learning as much as she would have, had she been a hearing student. In a due process hearing, the officer upheld the school district's decision, declaring that the student's achievement level was increasing, and she was progressing educationally, academically, and socially without this additional assistance. Under the clause allowing judicial review, Amy's parent petitioned under the U.S. District Court in the Southern District of N.Y., arguing that the public school's denial of a sign language interpreter was a denial of FAPE as granted under IDEA. As warranted under provisions in educational code, the parents exhausted administrative recourse and ultimately pursued their complaint to the Supreme Court where it was determined that Amy was receiving an "adequate education" that assured "educational benefit"—in other words, the district was meeting the benchmark for provision of a free appropriate public education (FAPE).

In subsequent litigation, courts have adopted a two-part test to determine if a school district has provided a FAPE to comply with IDEA standards (Grenig, 2007). First, courts seek to determine if the public school has reasonably calculated an educational plan to allow the child to receive educational benefit. The *Hendrick Hudson District Board of Education v. Rowley* (1982) case explored this notion of "adequacy" under the Act and courts clarified the FAPE requirements. Specifically, educational instruction must occur under public supervision and at public expense. Instruction must meet educational standards established by the state as grade appropriate and likened to that which is supplied to non-disabled students. Further, it must be in accordance with the child's individually determined plan for education. If a public school has met these requirements, they have complied with the legal mandates set forth in IDEA.

Central to IDEA, is a child's education plan. Under the Rowley ruling, the Supreme Court outlined what an IEP must contain (Goren, 1997).

1) Specific statement of the child's present levels of academic performance
2) Annual instruction goals and short-term objectives for each qualifying area of disability
3) Statement of supplemental services and service providers with implementation date, frequency and duration of services, and evaluation procedures to assess goal attainment
4) Provision of annual, or more frequent review of the plan

Seligmann (2005) states that this "Rowley test of educational benefit" set up terms of deference to local school district's expertise and public school "due weight" constraints for service provision to individuals served under IDEA (p. 2). Districts decide the methodology employed to establish educational benefit for the child, but they are not required to maximize the educational experience. Parents are partners in the decision-making processes for determining their child's educational plan and are entitled to due process rights that may culminate in federal court review if necessary (20 U.S.C. § 1415(f)), challenging "appropriateness" both judicially and administratively.

For clarity, the Rowley case established that schools must provide an adequate education but under IDEA, are not required to maximize the potential of the student (Weber, 2012). In review of court records for autism cases between 1983 and 2016, the Rowley standard has frequently been used for dismissal of autism cases when an IEP placement is deemed *adequate* though not *optimal* for the student with autism. Within the Rowley case, it was found that the student was provided an education plan that was calculated within reason to assure educational benefit. Amy Rowley was being educated in a mainstream setting with non-disabled peers in an environment suitable for her needs in line with legislation providing that children with

disabilities must be provided basic opportunity. According to Weber (2012), the Rowley decision provided lower courts the means of a common-law approach in interpreting the Rowley *floor of opportunity* to indicate that assurances must be given that a child who is disabled is given opportunity equal to that of non-disabled peers, to reach their potential. Necessarily, this interpretation would require a district to provide supports necessary to assure education in the least restrictive environmental (LRE) setting possible. To clarify, IDEA expressly provides a more narrowed parameter in that a student with an IDEA covered disability must be educated to the maximum extent as is appropriate with peers in regular classrooms, doing so with specific supports and aids in place to assure an "educational benefit." This level of service delivery, while "adequate" may not be "optimal." It should be noted that research informs that education of students with disabilities in general education classrooms acknowledges specific benefits to both students with and without disabilities (Causton-Theoharis and Malmgren 2005; Cole 2006; Frattura and Capper 2006; Katz and Mirenda 2002; Salend and Duhaney 1999). For Amy Rowley, LRE was never a point of challenge. The question that prevailed was what legally is indicated to be "sufficient" to confer a free appropriate public education (Rowley, 1982). This question of "sufficiency" and "appropriateness" continues to be answered with development and examination of each child's IEP developed in the shadow of the Supreme Court's landmark IDEA decision (Zirkel, 2008).

The Rehabilitation Act of 1973 - § 504

The Rehabilitation Act of 1973 (29 U.S.C. § 793) provides further protection against discrimination for individuals with disabilities and like the Americans with Disabilities Act (ADA) of 1990, has several sections (Disability.gov, 2016) (see Figure 1). The drafting of the Rehabilitation Act sought to protect individuals with disabilities of all ages against

discrimination (Brennan, 2013). It should be noted that parents of students seeking tuition reimbursement are required to fully exhaust remedy under the Individuals with Disabilities Education Act. Though specific protection is afforded under §504, a parent should first address their grievance under IDEA. Grievances pursued under provisions of the Rehabilitation Act of 1973 fall under multiple regulatory departments (see Table 1).

Table 1

Rehabilitation Act of 1973, U.S. Department Regulating Agencies

Section	Provision	Regulatory Agency
§501	Prohibits federal employees from discrimination against qualified individuals with disabilities; obligatory affirmative action response	U. S. Department of Labor; Equal Employment Opportunity Office
§503	Prohibits employment discrimination by federal contractors or subcontractors; requires affirmative action in hiring, placement, and advancement of individuals with disabilities	U.S. Department of Labor
§504	Regulates federal agencies, programs, or activities receiving financial assistance or are conducted by a federal agency, from discriminating against qualified individuals with disabilities. Includes accessibility, accommodations, and communication.	U.S. Department of Health and Human Services; U. S. Department of Education
§508	Regulates federal electronic and information technology access for individuals with disabilities.	U.S. Department of Justice; U.S. Department of Public Safety; U.S. Department of Defense; U.S. Department of Commerce

The Burlington Effect

In *Burlington School Community v. Massachusetts Department of Education* (1985), the courts offered opinion on whether tuition reimbursement was a possible remedy for a parent-initiated unilateral private school placement (Martin, 2011). The court also addressed parents' roles in educational decision making and offered clarification for procedural safeguards. In a unanimous vote in favor of the parents, Supreme Court judges determined that the Education of Handicapped Children Act allowed for reimbursement for private school tuition and transportation, providing that FAPE has been denied with the school provided IEP found inappropriate—not reasonably calculated to confer educational benefit—and the parents' private school placement is found appropriate—meeting IDEA standards. Tuition reimbursement is considered a matter of equity under IDEA wherein a parent may seek reimbursement for educational expenses they have incurred in the absence of an appropriate public education. Further, a parent's unilateral placement in a private school facility--without the consent of the public-school system with offering an IEP and alternative placement—does not bar the parent from consideration for reimbursement of educational expenses when the parent can satisfy the requirements of the standard set within Burlington.

The Americans with Disabilities Act (ADA) of 1990

Congress increased the provisions of the Rehabilitation Act of 1983 through the drafting of another act which increased protection for individuals with disabilities. The Americans with Disabilities Act (ADA) of 1990 (42 U.S.C. § §12101 et seq.) provided civil rights protection for disabled individuals "in all areas of public life, including jobs, schools, transportation, and all public and private places that are open to the public" (Mid-Atlantic ADA Center, 2015). "Disability" is defined as a legal term rather than a medical term and includes "a person who has

a physical or mental impairment that substantially limits one or more major life activities" (Brennan, 2013). The act was divided into five sections, each relating to a different aspect of a person's public life (see Table 2).

Table 2

American's with Disabilities Act of 1990

Section	Area	Provisions	Regulated/Enforced By
Title I	Employment	Equal access to employment opportunities and benefits; accommodations; and health and safety	U. S. Equal Employment Opportunity Commission
Title II	Public Services; State and Local Government	Barrier-free access to public programs and services; access to public transportation (subway, commuter rail, city bus)	U. S. Department of Justice
Title III	Public Accommodations and Services Operated by Private Entities	Protection from discrimination based on disability; communication accommodations; modifications for access to services, events, and private transportation (cab, shuttle, bus).	U. S. Department of Justice
Title IV	Telecommunications	Nationwide interstate and intrastate telecommunication access for hearing and speech impaired individuals	Federal Communication Commission
Title V	Miscellaneous Provisions	Assorted protections including prohibition of retaliation, impacts on insurance providers and benefits; illegal use of drugs; and attorney's fees.	Assorted Federal Departments

The Florence v. Carter Contribution

A definitive case, *Florence County School District Four v. Carter* (1993) expanded the court's provision of remedy when it established a parent's entitlement to reimbursement for private school education for their handicapped child even when the private school placement does not conform to established state standards. Through unanimous vote of the U.S. Supreme Court, parents have the right to enroll their child in a "non-approved unilateral private placement if the public IEP was inappropriate and the private placement provided an appropriate program" (Martin, 2011, p. 2). The private school placement also is not required to evaluate the student to develop an individual education plan. Additionally, they are not required to meet technical requirements mandated for public schools (Martin, 2011). Current IDEA regulations state that "parental placement may be found to be appropriate by a hearing officer or a court even if it does not meet the State standards that apply to education provided by the SEA and LEAs" (34 C.F.R. §300.148(c)). If a private school meets the standard for appropriateness as established through Rowley, a parent may be entitled to compensation through tuition reimbursement.

Study Contribution

This exploratory study will fill a gap in research for understanding the voting habits of judges presiding over autism reimbursement cases with decisions issued by the U.S. Appellate Court between January 1983 and August 2016. To this date, partisan influences, and possible effects of both precedential court decisions and key U.S. legal statutes on appellate judges' voting in autism reimbursement cases, has not been previously researched. Researching the influencing factors on legal decision in reimbursement complaints is important for several reasons. With the growing number of individuals with autism spectrum disorder served under the umbrella of IDEA in our nation's public schools, and the large number of reimbursement cases previously heard by the U.S. Appellate court with the past 30 years, understanding the factors affecting case outcomes brought forth on behalf of children with disabilities is prudent. It is true that parents' perceived denial of FAPE for their children within the public-school system frequently results in costly litigation by parents without successful remedy through reimbursement for private educational services (Marlett, 2008). Boards of education may glean helpful information for parent training and service delivery that reduces the amount of litigation brought forth by parents of students with autism who claim denial of a FAPE. Further, understanding the nature of judicial decision making within these cases can inform legislators and public-school administrators in policy development, and implementation. By better understanding the nature of these cases' decisions, it may be possible to also advise parents and their lawyers on best practices for prevailing in their complaint. No extended research to investigate IDEA and civil rights FAPE violations in appellate cases involving tuition reimbursement for students with autism has been located.

Research Questions

Ideology

1. Does U.S. Court of Appeals judges' political ideology (as measured by party-of-appointing President or DW-NOMINATE Measure scores) influence their voting in whether to award tuition reimbursement under the IDEA in cases involving students with autism?
2. Are there differences in the power of party-of-appointing President (Republican or Democrat) and DW-NOMINATE Measure scores (political conservatism or liberalism) in predicting whether court of appeals judges' award tuition reimbursement in IDEA cases involving students with autism?

Law

3. What influences do legal developments in IDEA 1997 Amendments exert on Court of Appeals judges' voting in IDEA tuition reimbursement cases involving students with autism?

Equal protection rights and non-discrimination have been at the forefront of legal discussion with the further clarification of students' rights unfolding within each IDEA amendment. Parents of children with disabilities have been forced to navigate through ever shifting policy development, with each amendment to IDEA further defining requisites for reimbursement of educational expenses.

Within the next chapter's literature review, the 1997 and 2004 IDEA amendments will be specifically discussed. Remedies available for children who were not provided FAPE will also be explored. Next, information on precedential interpretations of law expressed through judges'

opinions and decisions of the court will be discussed to frame shifts in adequate educational services for students with special needs.

The various factors affecting judges' decision making will be utilized to discuss the framing of this research. Use of factors of political party of the appointing president as well as DW-NOMINATE Measure scores as proxies for judges' ideology will be explored. The second portion will look at the unique challenges for parents and educators in meeting the needs of children diagnosed with autism spectrum disorder. The narrative will look broadly at characteristics generalized for those with autism, discussing student attributes, capabilities, and deficits. Various treatment options for students with autism will also be explored.

CHAPTER 2: LITERATURE REVIEW

History of Special Education Federal Statutes

Early Special Education Law

Between the year 1958 and the year 2004, parents of students with disabilities residing in the United States have seen progressive shifts in public opinion about services for individuals with disabilities, resulting in groundbreaking regulations for K-12 educational settings that advanced the individual rights of children from birth to 22 years of age. Between the years of 1958 and 1961 the federal government trained personnel, developed and distributed specialized educational materials, and provided support for public facilities to meet the needs of children with disabilities.

On April 9, 1965, as the nation waged a united war on poverty, President Lyndon B. Johnson opened the doors of equal education for all children in his signing The Elementary and Secondary Education Act (ESEA) (1965). Adoption of this act meant that federal monies—in the form of grants—were made available to states striving to provide education for disabled students. It was anticipated that by appropriating federal funds for both primary and secondary education, equal access would be created for at-risk students.

In 1966, Congress further addressed educational need with the establishment of a grant program "for the purpose of assisting the States in the initiation, expansion, and improvement of programs and projects…for the education of handicapped children" (Elementary and Secondary Educ. Amendments of 1966). This 1966 grant program was repealed after a short time, however, by the Education for the Handicapped Act (1970), which contained programs similar in nature to those contained within the Elementary and Secondary Education Amendments of 1966. It is unfortunate that this later legislation within the Education for the Handicapped Act (1970) did

little to correct the vagueness of law in guiding a state's use of educational grant money. The primary goal of the Act was to stimulate the nation to better train teachers working with students with handicaps rather than provide clear articulation of service delivery for provision of FAPE. In 1968, the Handicapped Children's Early Education Assistance Act (HCEEA) was enacted so that the needs of the youngest disabled students (preschool handicapped) were addressed monetarily.

The drafters of HCEEA captured within their narrative the U.S. government's sentiment which favored addressing critical provisions for parents of children with disabilities in need of help. This statute stated:

> Few parents are prepared psychologically or financially to shoulder the enormous burden of care and treatment for a handicapped child. Parents of handicapped children may have fears and are often frustrated and bewildered. They need help in understanding their child's disability. They need help in working with their handicapped child. Therefore, it is deemed appropriate to provide educational programs for handicapped children which provide comprehensive supplementary aid for their parents. In addition, it is anticipated that programs will enlist the help of the parents as allies and associates of educators to provide a total program. (p. 4)

Pro-parent sentiments continued into the 1970s, as evidenced by the 1971 landmark case heard by the U.S. District's 3rd Circuit on behalf of students housed in state-run schools. The Court ruled in favor of plaintiffs seeking equal treatment for the state's most challenged students having intellectual disabilities and physical needs warranting year-round care. Many were wards of the state. The Pennsylvania Association for Retarded Children (PARC) v. Commonwealth of

Pennsylvania (1971) case challenged and prevailed with assertions that students should receive equal protection under the law and be served in publicly funded schools. Further, their services should be based on individual evaluations on which to base educational plans especially suited for each student.

In that same year, Mills v. Board of Education of the District of Columbia challenged under the equal protection clause of the Fourteenth Amendment educational eligibility determinations based on students being categorized as exceptional (Mills v. Bd. of Educ., 1972). The two cases advanced the rights of individuals with disabilities in a broader sense. Together these cases lay the foundation for assurance that under the Equal Protection Clause of the 14th Amendment of the United States Constitution every State is bound to provide for the education of students with disabilities. These further shape public educations' obligations for providing a free appropriate public education for all children. Where there is a shortfall the legal system has slowly evolved to provide remedy for parents seeking reimbursement for self-initiated private services in their pursuit to provide for the unique needs of their children with autism spectrum disorder.

The Mills ruling resulted in a consent decree which mandated public funding for students with learning disabilities, behavior disorders, and intellectual disabilities. By 1972, Congress began to grasp the enormity of the debacle created by unequal treatment of children with special needs within the public-school arena. The Economic Opportunities Amendments of 1972, an early childhood initiative, solidified the need for early intervention and remediation for childhood deficits. Financial support for the Head Start program was appropriated, and enrollment of pre-school students with economic and educational disadvantage was mandated.

Additionally, in 1972, Congress was faced with the realization that despite attentiveness to the problems perceived in public education, federal and state interventions were still inadequate. Congressional reports from the Bureau of Education for the Handicapped revealed that approximately 8 million children needed special education services. By 1974, Congress determined that increasing the allotment to states would allow necessary adherence to federal mandates for providing equal access to all children with handicapping conditions (Educ. Amendments of 1974). Congress utilized amendments as a temporary fix-all for the recognized disparity among public institutions service delivery for disabled children, recognizing how critically the nation needed to provide all children an adequate education.

Of great concern in 1973 was the fact that "there [were] seven million [of the nation's] children…with mental or physical handicaps…" being under-educated with one million of the most severely impacted by their condition who were not being educated at all (U.S. Congress, 1973, p. 722). By 1975, it was found that approximately 3.5 million school age children still were underserved in the public arenas.

In response to the Congressional reports evaluating the status of public education in the United States, President Gerald Ford signed The Education for All Handicapped Children Act (EAHCA) in 1975. Because of this act, parents who did not agree with special education services were provided with the right to a hearing to have their grievances heard. This provision attached conditions to states' receipt of federal financial assistance which required recipients to provide equal access to public education for those children ages 3 and older requiring special support. Through later provisions within the Education of the Handicapped Act Amendments of 1986, the previous act was amended to extend services beginning from birth to age three for children with a handicapping condition.

A significant milestone aimed at alleviating the financial strains for the nations' most at-risk and most handicapped, the State School Aid Act of 1979, specifically aided financial deficits within publicly run residential school facilities. For the population of most severely handicapped students, many of whom were wards of the state, provision of federal aid meant better facilities, increased staff, and funding for therapeutic interventions.

Special Education Law in Later Years

There are two additional federal actions of note for this study. The first occurred in 1986 when President Ronald Reagan signed the Handicapped Children's Protection Act. This act mandated parental involvement in the development of their child's individual education plan, which scored a critical victory for parents of students with disabilities. Due to this legislation, parental voice in provision for students' educational needs was not only encouraged, but procedural safeguarding to assure a parent's participation and inclusion in the process was codified through this "revised congressional measure giv[ing] parents an expanded role in how elements of the statute can be carried out for the benefit of students with special needs" (Daniel, 2000).

Congress' hope as they worked on the 1990 IDEA document was that all children with disabilities would be provided a FAPE. Additional changes came about in 1990, as the Individuals with Disabilities Education Act (IDEA) clarified states' obligations for service provision and amended individual students' rights held in the long-standing Individuals with Disabilities Education Act of 1975. This was partially achieved by their adding two additional federally funded disability categories—traumatic brain injury (TBI) and autism (AU) (Individuals with Disabilities Act., 1990). Students with autism were no longer labeled under broad categories of mental retardation, other health impaired, or learning disabled, but now

received the primary coding of their actual disability under autism spectrum disorder (Marlett, 2009). Samuels (2016) reported that the use of real numbers for actual disabilities impacts funding on a national level as child-count data indicates that autism is no longer a "low incidence" disability. While the Americans with Disabilities Act of 1983 afforded protection against disability discrimination for some students with autism, within two years, a more comprehensive attempt to more broadly meet the needs of students was enacted (Zirkel, 2008). A closer look at The Individuals with Disabilities Education Act of 1975 and the amendments that followed in 1997 and 2004 will help to frame the intricacies of the various parental litigations that will be addressed within this study.

The Individuals with Disabilities Education Act (1975), Pub. L. No. 94-142, 20 U.S.C. § § 1401-1415

In 1975, Congress passed The Individuals with Disabilities Education Act (IDEA) to solidly address the need for uniform delivery of a free, appropriate public education (FAPE) and the leveling of the playing field of service delivery for differently-abled students served within our nation's schools. The financial support of the federal government under the provisions of the 1975 Act was only accessible when a State proved that it had "in effect a policy that assure[d] all handicapped children the right to a free appropriate public education (FAPE)." (20 U.S.C. § 1412(1)). The State must have submitted to the U.S. Commissioner of Education (20 U.S.C. § 1413), an approved plan with specific programmatic goals and specific timelines for educating all students with handicapping conditions residing within their state lines to qualify for the money. In response to the findings of the investigating committee of 1974, the federal government stipulated that the State must educate by priority-- first the "handicapped children who are not receiving an education" as well as the "handicapped children…with the most severe

handicaps who are receiving an inadequate education," (20 U.S.C. § 1413(3)), notwithstanding educating "to the maximum extent appropriate" all "children who are not handicapped." (20 U.S.C. § 1412(5)).

Considering this study, a critical component of the Act was the definition of "handicapped children" which specified "mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, orthopedically impaired…other health impaired, [and] children with specific learning disabilities." (20 U.S.C. § 1401(1)). These nine narrow categories identified those deemed as federally specified disabilities under IDEA. An unforeseen outcome of this definition was the exclusion of three major groups of children with disabilities—students with Tourette's syndrome, autism spectrum disorder, and individuals with traumatic brain injury. These children did not categorically fit within the stipulations of the Act forcing public schools to identify these students under "other health impaired" or "learning disabled" to be reimbursed for services.

With IDEA's 13 covered disability categories, a shift in labeling of children at the school district level necessarily occurred to update children's IEPs to include specific language proposed within the amended IDEA. Such is the labeling of students with autism as a door to access IDEA protection. In cases reviewed for this research, it was found that within court documents for decisions prior to the adoption of the 1975 Act, children with autism appear to have been identified first as being "a child with a disability," "a learning-disabled child," or "a child in special education." In my pursuit to identify legal decisions brought forth on behalf of students with autism, "autism" was often a secondary descriptor of the child and "autism" was often deeply imbedded within the court documents since the students were being served with public schools as "a mentally retarded (MR) student," "a student with other health impairments

(OHI),” or a “learning disabled (LD) child” rather than specifically served under IDEA as “a child with autism (AU).”

Individual Education Plan. A second provision of IDEA significant to this study pertaining to the provision of a FAPE is the requirement of public schools to develop an individualized education plan (IEP) for each student (20 U.S.C. § 1401(18)). A student identified as qualifying for special education services under one of the IDEA specified categories must be offered an individual education plan developed based upon a full assessment of the student’s abilities to establish present levels of performance in areas associated with their disability. Of further significance-- the meeting for developing an IEP must be comprised of qualified participants including a representative from the Local Education Agency (LEA), the parents or guardian of the child, the student’s teacher, and as is appropriate, the child. The document generated by the committee must include specific information. Foremost, the present levels of the child’s educational performance must be noted and determined based on a variety of assessment measures. Also, the amount of time the student will be educated within the regular education environment must clearly be stated documenting education in a least restrictive setting with non-disabled peers (LRE). The plan must include specific annual instructional goals containing short-term objectives.

The IEP must also include a list of specific services and service providers to meet the individual needs of the student, and the projected implementation date and duration of the specified services must also be clearly articulated. Additionally, the criteria by which the student will be evaluated to document progress toward achieving the stated goals must be well-explained. The goals within an IEP must be specific, measurable, attainable, realistic, and timely (SMART) (20 U.S.C. § 1401(19)). Finally, the IEP must be updated annually with the meeting of

the committee to review and update the provisions outlined within the IEP. (20 U.S.C. § 1414(a)(5); 1413(1)(11); and 1414(1)(5)). It is important to further note that "adequacy" is outlined as the provision of instruction and services at the public's expense as dispensed under public supervision in a manner that meets the established State educational standard and at the grade level as adopted by the State's policy as applied for general education. Sufficient support services must also be in place so that the child benefits from the provided instruction.

A highly litigated point for parents seeking tuition reimbursement stems from IDEA's lack of specificity in requiring public educators to maximize the potential of handicapped children. Larger public-school districts with budgets that sustain variety in programmatic opportunities and staffing for students with special needs may afford a higher level of service delivery than those districts with far fewer resources. While Rowley requires that educational benefit be afforded to meet IDEA standard for provision of a FAPE, districts vary greatly in defining what is "adequate." States have seen fit to adopt clarifying statutes in the absence of federal guidance. In this manner, the federal code was interpreted, and state documents were adopted to better guide district level courts.

Parent Procedural Safeguards. The Act of 1975 also brought about strict procedural requirements regarding notification of changes in the individual education plan. Parents or guardians of those children being serviced under an IEP must be notified about any needed change for "the identification, evaluation, or educational placement of the child or the provision of a free appropriate public education to the child," and must be afforded access to due process of a complaint for "any matter relating to" to the provisions of the Act. (20 U.S.C. § 1415(b)(1)(D) and (E)). The parent or guardian's complaint must be addressed through "an impartial due process hearing," with opportunity for appeal to their State's educational agency as

needed (20 U.S.C. § 1415(B)(2)). Additionally, "any party aggrieved by the findings and decisions" of the State's educational agency has "the right to bring a civil action with respect to the complaint" through the proper hierarchical court channels within the state and federal court system having appropriate jurisdiction over the matter being heard (20 U.S.C. § 1415(e)(2)).

IDEA left primary responsibility for development and monitoring of individual education plans of disabled children to the States. The attachment of the stipulations for receipt of federal funds therefore was met by development of state and local regulations for the management of IEPs. If a State fails to meet applicable IDEA standards a judicial review may ensue which could result in withholding of federal funds to the offending state (20 U.S.C. § 1414(b)(A)). The Department of Education, in rare occasions seeks corrective actions to rectify any problem in lieu of reducing or requiring state's returning of provided funding.

The law provides a clear course of action if parents disagree with aspects of their child's educational placement or service provisions under special education. They may exercise their due process rights to a formal hearing to have their complaints heard and addressed by the local district. Unfortunately, parents may not follow due process procedures at the local level, and instead may choose to withdraw their child from public education without giving the district opportunity to take corrective action or reach a compromise through revisions within the child's IEP (Zirkel, 2013). Parents may instead unilaterally enroll in a private school placement during review of their complaint by the local district, removing their child from public education. Parents then seek tuition reimbursement and compensation for supplemental services (such as speech and occupational or physical therapy, or compensatory services) from the local school system. Based on preliminary reading of appellate cases between 1983 and 2016, much of

autism's reimbursement litigation appears to evolve from the unilateral private school placement because of parental choice.

Parents as plaintiffs have sought clarity and continuity in resolutions of educational complaints and provision of a FAPE for the child. Plaintiffs have called upon the legal system to right perceived inequities via judicial review, pursing their interests through litigations within the U.S. Appellate Court. Based on a preliminary view of complaints within this court's decisions, however, the decisions by the U.S. Appellate Court's judges have delivered mixed results for litigants seeking reimbursement on behalf of students with autism. Decisions rendered in two key cases established precedence prior to the IDEA 1997 amendments whereby establishing the foundation used thereafter for deciding tuition reimbursement cases under IDEA: School Committee of Burlington v. Department of Education (1985) and Florence County School District Four v. Carter (1993).

Tuition reimbursement. In *Burlington v. Department of Education* (1985) and *Florence v. Carter* (1993) the courts began to clarify parameters for the conditions in which a parent may be entitled to receive tuition reimbursement for their child. The remedy of tuition reimbursement by a court initially resulted from a school district's denial of a FAPE and the private school placement being declared appropriate (Burlington v. Dep't of Educ., 1985). Further clarification was seen in *Burlington v. Department of Education* (1985) for parents who unilaterally place their child in private school settings. Parents cannot be barred from seeking tuition reimbursement during proceedings held by the local school district to review students' educational plans. Further guidance for determining tuition reimbursement came through *Florence v. Carter* (1993) wherein the court clarified that a private school does not have to be approved by the state to be considered for tuition reimbursement.

Courts hence have utilized the Burlington-Carter test for deciding tuition reimbursement cases. Decisions on tuition reimbursement post-1993 include a review for the following:

1. Is the Individual Education Plan (IEP) offered by the public school "reasonably calculated" to confer a FAPE with "meaningful educational benefit" for the child?
2. As required under IDEA, is the private school placement selected by the parent "appropriate" as found by a hearing officer or court?

Under IDEA 1997 amendments, Congress codified the remedy for tuition reimbursement to specifically address issues brought forth in the Carter and Burlington cases for parent's unilateral private school placement (Grenig, 2007). Congress further clarified that if a school district did offer an IEP that was designed to meaningfully confer an educational benefit that they met the requirements for a FAPE provision as set forth under IDEA. This reauthorization of the statute, supported school districts in reducing or denying tuition reimbursement if the parent did not provide to the school district, prior notification of their intent to enroll in a private school setting. Further, if a parent refused to comply with evaluation of the child—so that an IEP could be drafted from the test results—the court may also deny or reduce reimbursements (Martin, 2011). These policy measures provided public schools opportunity to draft an appropriate IEP and encouraged communication with parents regarding public school programming offered to meet their child's needs, prior to withdrawal of their child from public school.

Forest Grove v. T.A. (2008). In 2009 the reimbursement of private school tuition was specifically addressed by the U.S. Supreme Court (20 U.S.C. 1412[a][10][C]) through certiorari granted in the litigation brought forth in Forest Grove School District v. T.A. (2008). The court provided clear guidance for parents seeking tuition reimbursement for a child who has never received special education services when the parent has otherwise satisfied the Burlington-Carter

test for reimbursement. Through Burlington, if a parent unilaterally enrolls their child in a private school setting, the child is not required to have previously been enrolled in special education services in a local education agency for tuition reimbursement to be considered as possible remedy. A hearing officer may require a public school to reimburse a parent if the public school did not provide a FAPE or if they did not do so in a timely manner (Martin, 2011).

To review, the Burlington case allowed a parent to make a unilateral placement decision enrolling outside the public schools' domain if FAPE had not been met, and an appropriate IEP was not offered, or if the implementation of the program was not in a timely manner. The parent may give notice to the district with intent to unilaterally place their disabled child in a private school, residential facility, or other appropriate placement even if their child has never accessed public special education. Tuition may be awarded if during the required hearing, the officer finds the district had denied a FAPE to the student. IDEA revisions in 2007 formally codified tuition reimbursements for unilateral private school placements by parents of children with disabilities who had not been previously served by public agencies (20 U.S.C. 1412(a)(10)(C).

1997 IDEA Amendments. The Individual with Disabilities Education Act Amendments of 1997 was signed by President Bill Clinton in 1997 and was enacted to improve public education for children with identified disabilities. The rights of each child to receive a free appropriate public education (FAPE) were also reiterated and specific provisions regarding student performance and achievement as prescribed by NCLB were established. States were required to address inclusion of students with disabilities in all state- and district-wide assessments. Further, evaluation of any child thought to have a disability was mandated with assessment in each of the areas of suspected disability. Based on a thorough evaluation, an individual education plan (IEP) should also be developed indicating service providers, types and

frequency of support services, specific stated goals for achievement, and actions needed to assure attainment of stated goals. Further, service delivery of the IEP must occur in the least restrictive setting (LRE) possible, with supplemental aids and support, and preferably with non-disabled peers to the maximum extent possible. The parent's input and participation in the process is required. If a parent disagrees with the individual education plan or service delivery, they have the right to have their grievances heard by the public school and state hearing officers. Under due process provisions, the parent may also pursue their interests through state and federal courts provided they have exhausted their claims at the local and state levels. This newly drafted legislation also included tuition reimbursement provisions built upon the scaffolding of the Burlington and Carter decisions.

To summarize, the IDEA Amendments of 1997 not only modified the required contents of individual education plans—with increased accountability of service delivery to assure provision of FAPE—but the statute also increased accountability of states to assure academic achievement of students with disabilities. Congress also codified specific guidelines for parents seeking reimbursements, relying on the wording of the Burlington court to grant tuition reimbursement, and renumbering the provision (§ 1415(e)(2).

The Individuals with Disabilities Education Improvement Act of 2004 (IDEIA)

The Impact of No Child Left Behind

In 2004, the federal government drafted revisions to IDEA which resulted in significant changes as Congress sought to align this longstanding "special education work horse" with the goals of No Child Left Behind (NCLB) Act—a nationwide attempt to meet the educational needs of all children (NCLB, 2008). Under NCLB, children with disabilities were required to participate in state and local testing to document performance included in academic progress

measures. Specific performance measures were established for all students regardless of ability level. Student performance measures were tied to standardized criteria for determining adequate yearly progress documenting improvement (or lack thereof) of a child's academic performance from year to year. Performance gains were part of the reporting mandated by the state and federal government and was directly tied to school funding. This directly impacted the contents of the reauthorized IDEA (Marlett, 2009).

In response to NCLBs educational directives, The Individuals with Disabilities Education Improvement Act of 2004 (IDEIA) altered performance goals for students with special needs. The amendments included a requirement that all children, regardless of their disability, must be included in statewide NCLB test measures (Marlett, 2008). Students' individual education plans thereafter were reviewed and changes made to comply with the new mandates. Local school districts had to alter IEP forms to address changes in IDEIA in respects to planning and monitoring academic performance measures for a disabled student's compulsory participation in state and local assessments. Children's participation in mandated state assessments and local tests can be excused by an admission, review, and dismissal (ARD) committee convened on behalf of the child. Any allowable accommodation to be used by the student in the test environment must be documented within the IEP document. The accommodation must be regularly used by the student within the daily educational setting to promote the student's success. The type, frequency, and purpose of the accommodation must be specifically documented within the IEP and be allowable under the administration directions for each of the tests for which the student takes. If a child is denied an IEP mandated accommodation that is allowed within the parameters of the test administration, severe consequences may occur for the school district. A denial of accommodations is a reportable error for the school and district. If a

teacher or administrator is indicated as responsible for this type of infraction, punitive measures such as suspension or loss of licensure, release from school contract or demotion may occur.

Families' rights. IDEIA 2004 amendments brought about changes that "limit families' rights to recourse under the IDEA" with "changes in the allocation of burden of proof, recovery of expert witness fees, and recovery of attorneys' fees" (Marlett, 2008, p. 66).

Further, the reauthorization required mandatory arbitration between parent and school district before a parent may enlist due process rights. Additionally, IDEIA placed a statute of limitations in parents' filing of due process hearings, requiring that parents must bring forth their IDEIA complaint within a two-year window of the violation. The time frame begins at the point the parent first became (or within reason, should have known) that a violation had occurred. If the claim brought forth against the school district is found to be without merit

Highly qualified special education teachers. As in NCLB, IDEA provided for the institution of the term highly qualified pertaining to teachers of students with disabilities with certification of service providers gaining greater emphasis (Office of Special Educ. and Rehabilitative Serv's., U.S. Dep't of Educ., 2008). All elementary and secondary special education teachers must now be highly qualified in special education as specified under IDEA (20 U.S.C. 1401(10)). This standard is equivocated to the NCLB requirements for highly qualified teachers under ESEA (20 U.S.C. 7801(23)).

Assessment of individuals with disabilities. The IDEIA 2004 Amendments provided specificity for a district's provision of parental notice, and the gaining of parental consent for evaluations. Under IDEIA, schools were required to obtain parental consent to conduct an initial or three-year re-evaluation. The wording in the policy was amended to state specifically that "a public agency [must make] reasonable efforts to obtain the informed consent from the parent for

an initial evaluation" (34 C.F.R. §§300.300(a)(1)(iii)). If a parent does not consent after due diligence by the district, the district does not violate its obligation in the event they decline to assess (34 C.F.R. §§300.301 through 300.311). The district, however, must maintain clear records of attempts to contact the parent to obtain consent. Likewise, if a parent enrolls their disabled child in a private school, and does not consent to evaluation, the public school district does not violate its obligation by declining to proceed with the evaluation. The non-consenting parent essentially is not eligible for services as a parent of a student who is unilaterally placed in a private school setting who might otherwise seek reimbursement (34 C.F.R.§§300.132 through 300.144). This narrowing of the statute further clarified requirements for possible reimbursement for parents of students with disabilities being served in private settings.

Identification of individuals with disabilities. Established student rights through IDEA were reiterated within the 1997amendments but clarity to IDEA-covered disabilities was yet to be developed as parents in post-1997 litigations helped pave the way in the enforcement of children's rights. Argument often focused on the point that a child found to have a disability must have been properly evaluated and found to qualify for services under one of thirteen conditions (34 C.F.R. §§ 300.304 through 300.311). The 2004 IDEIA expansion of recognized disability categories had immediate repercussions, as students with autism related disorders were formally recognized as eligible for federally funded, reimbursable services under the formal category of "autistic" within IDEIA 2004's expanded disability categories. The 2004 list of 13 disabilities was inclusive of a child having an intellectual disability (ID); as one qualifying under deafness or another impairment of hearing (AI); as eligible for an impairment of speech or language (SI); being blind or have another visual impairment (VI); having both deafness and blindness; as dealing with severe emotional disturbance (ED); as having mobility issues and

being diagnosed with an orthopedic impairment (OI); possessing a specific learning disability (SLD); being diagnosed with autism spectrum disorder (AU); being identified as other health impaired (OHI); having a traumatic brain injury (TBI); or being multiply handicapped with concomitant conditions affecting their ability to access educational services.

In short, the 2004 IDEIA amendments provided refinements, bringing clarity to the wording, and broadened the scope of individual student rights previously afforded under the 1997 IDEA. Classifications for individuals under IDEA were increased to thirteen categories by adding autism and traumatic brain injury. Evaluation and plan development procedures were outlined. Parental involvement in the education process and avenues of recourse when challenging a student's educational plan or service delivery was further defined. Due process procedures for parent notification and involvement within the development of the individual student plan was also clarified.

Remedy under IDEIA. With IDEIAs increasing focus on procedural safe guards and parental involvement in the development and monitoring process of individual education plans, it is likely that with increased awareness and participation, increases in monitoring plan implementation have led to discovery of possible deficits or inefficiencies in service delivery. For parents of children who determine that violations to FAPE requirements as stated within an IEP have occurred, due process rights allow for an impartial administrative hearing as a first recourse. States' educational systems provide for an appointed hearing officer to review the parent grievance. Once a parent has exhausted their states' provisions for hearing their complaint, they may then pursue remedy through the federal courts, including the U.S. Court of Appeals, and ultimately the U.S. Supreme Court. Generally, once a parent chooses a forum for

the hearing of their complaint, the parent must administratively exhaust their complaint at each court level before elevating through the appellate process.

Remedies most often sought by parents most often fall into two categories: 1) compensation; and 2) reimbursement. *Compensatory education* is the provision of services which compensate a student for mandated services that were not received. This often is seen when public schools are understaffed or lack specially trained staff to delivery IEP mandated supports. *Reimbursement* for expenditures that are out of pocket may include private tuition, travel and boarding for out of state private school placement, salaries for private service providers, supplemental educational materials and equipment, supplemental therapy services (ie., speech, occupational, physical therapy, orientation and mobility training), and therapeutic behavioral training. Further parents often seek reimbursement for legal fees, payment for expert testimony, lawyer's fees, and associated costs of litigation (Marlett, 2009). A parent seeking remedy through the courts must clearly establish that FAPE has been denied. The burden of proof is placed on the parent (Grenig, 2007; Marlett, 2009). Parents may also be granted remedy in the form of *injunctive relief* wherein the court orders relief through specific district action. This may include a public school's increasing student opportunity for education in a least restrictive setting and making changes to the instructional setting, increasing certain services deemed necessary to assure FAPE (such as additional speech therapy), and provision of specific support personnel to meet IEP specified levels of service as designated in an IEP.

Autism. The primary disability explored within this study, autism spectrum disorder, is a developmental disorder that affects both verbal and non-verbal communication, impacts social interactions, and is generally diagnosed by the age of three. Autism was formally recognized as a diagnostic category in 1980 by the American Psychiatric Association (Factor, Freeman, &

Kardash, 1989). It was not until 1994 that subtypes of autism were described within the DSM-IV, however (4th ed.; DSM-4; American Psychiatric Association, 1994). A significant change in the DSM-V was the adoption of "autism" as a global term that encompasses both Asperger's Syndrome and Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS) (5th ed.; DSM-4; American Psychiatric Association, 2013).

Social impairments in communication are paramount to an autism diagnosis. Children with autism are as varied as children without autism. The DSM-V has outlined specific markers of impairment to social interaction, impairments to communication, and markers for repetitive and stereotypical behaviors exhibited by individuals with autism spectrum disorder. Autistic children may engage in certain repetitive behaviors (such as hand flapping, and object spinning), demonstrate stereotypical body movements (such as rocking, or ticks), exhibit unusual responses due to hypersensitivity to sensory stimuli (such as exaggerated responses to light and sound), and display a general aversion to change in routines or daily activities. Autism Spectrum Disorder (ASD) is a Social (Pragmatic) Communication Disorder and encompasses subgroups such as Asperger's Syndrome (AS), high-functioning autism (HFA), and pervasive developmental disorder (not otherwise specified) (PDD-NOS) (5th ed.; DSM-5; American Psychiatric Association, 2013). National samples reveal a prevalence of 1:42 males and 1:189 females (MMWR Surveillance Summaries, 2004). These figures are likely to be artificially low, however, for individuals who are HFA and served through regular education programs are often not tracked (Assouline & Whiteman, 2011). Approximately 36% of students with autism receive instruction within general education classrooms (Newman, 2007).

Support services. Educational support services are unique to each student with autism, though not all students are served solely under an IEP. Students with autism may also receive

support under Sec. 504 of the Rehabilitation Act of 1973 (Section 504, 2005), and are also covered by various protective state laws as well as the Americans with Disabilities Act (ADA) of 1983. An overlap of service provision exists for some children though the requirements for educational planning and compliance differ for each law.

The nature and complexity of needed accommodations and modifications to the general education curriculum, setting, and services, as well as determinations by the parent and school staff, dictate which legal protections are accessed to best serve the child. Generally, the higher functioning a student is the greater the likelihood that minimal services are required, with support adequate solely under a Section 504 plan. When a child's service plan requires related services—such as occupational, physical, and speech therapy—these supports are usually accessed through the public school under the provisions of a special education IEP. Orientation and mobility services, vision services, and audiology (deaf and hard of hearing) services, as well as adapted physical education. One example of overlapping service provision covered under both IDEA and § 504, is skilled nursing services. A student covered under a § 504 plan or an IEP may require specific care while at school. Supports and monitoring for children diagnosed with pervasive medical concerns—such as diabetes, epilepsy, or serious allergies—fall under this category.

Specialized interventions. When more pervasive communication and behavioral needs are present, a parent may seek specialized treatments to meet the needs of their child. In the case of students with autism, it is generally thought that a dynamic, combination of methods and services are best. In a preliminary read of autism appellate cases between 1983 and 2016, certain methods such as Lovaas, Discreet Trial Teaching (DTT), ABA, and Denver Early Childhood Treatment have been programs of choice for parents seeking tuition reimbursement.

Florence County School District Four v. Carter (1993). *Florence County School District Four v. Carter* (1993) provided judges guiding principle for parents of students with autism accessing reimbursement for Applied Behavioral Analysis (ABA)/Lovaas therapy—the only therapy currently meeting evidence-based practice for students with autism (Rogers and Vismara, 2008). Chedd and Levine (2012) remind that "ABA is a scientifically based and comprehensive approach based on the principles of behavioral learning theory" and "it is often considered a first-line approach to treating autism" (p. 222). Instruction begins by breaking complex skills into their base sub skills and teaching the smallest, simplest component first. Reinforcement for accurate execution of the sub skill is rewarded to encourage increasingly more complex sequences to gain mastery and promote generalization to other situations and settings.

Teachers of students with Autism. *Highly qualified special education teachers* under IDEA (20 U.S.C. 1401(10)) must have certification or licensure in special education within the state of their employment. Additionally, they must hold at minimum a bachelor's degree. Further, they must demonstrate competency by passing a state-determined exam. The state must maintain a system to assure meeting of the set standards. In a preliminary investigation, each of these highly specialized programs requires a staff member's special training for service delivery and program implementation to meet the requirements of the IEP. IDEA specifically requires that all special education teachers must be highly qualified and possess certifications in the areas in which they instruct. Specialized training to implement research-based interventions for remediating students is encouraged though not mandated at the state level. Lovaas, DTT, ABA and the Denver ECT programs each require specific training prior to use with students with autism. Individual school districts set guidelines for hiring practices for teachers working with special populations such as autism. Districts often fund professional development opportunities

to assure classroom teachers increase their profession skills to meet the unique learning needs of students on the spectrum.

For children with autism, it is understood that the earlier an intervention treatment is started after a child is diagnosed, the better the long-term prognosis and outcome will be. Often public-school districts do not possess staff to support these types of highly specialized interventions, so parents unilaterally place children in private settings, or contract for in-home service providers. With IDEA's provision for highly qualified teachers as service providers within the public school sector, it is a possibility that parents may prevail for reimbursement under this provision, should a defense be structured to prove necessity of dictating specific methodology to provide for a FAPE.

High-functioning, gifted Autistics. Students with autism require a broad range of services ranging from instruction for the intellectually disabled to gifted and talented services for the highly intelligent and capable (Zirkel, 2012. Robison (2008) reports that autistic individuals by nature fall on a continuum possessing a broad range of functionality and ability levels. Giftedness can manifest as asynchronous development of superior cognitive abilities (Davis and Rimm, 2004) which can mask the autism traits for many high functioning students with ASD. Accordingly, these gifted, autistic students exhibit patterning of multiple symptoms rather than a singular identifiable trait and can have extremely high IQs and show extraordinary areas of giftedness while privately dealing with debilitating co-diagnoses of depression, anxiety, or other pervasive disorders.

Certain advances have been made in meeting the most capable autistic students. Researchers explored the existence of twice-exceptionality in the 1970s, but it was not until a colloquium held at Johns Hopkins in 1981 that the coexistence of giftedness and disability was

fully acknowledged (Fox, Brody, & Tobin, 1983). The field calls this twice-exceptionality of autism and giftedness "2e." Best estimates for prevalence of students with concomitant giftedness and autism ranges from 300,000 (Baum & Owen, 2004) to approximately 360,000 (National Education Association, 2006). Autistic students protected under IDEA have full access to services for the gifted and talented within their local school districts while being afforded the protection of a § 504 plan or IEP as is required for certain provisions. Like other students with disabilities, accommodations are allowed and articulated in the educational plan for students with autism to increase success within the educational setting. Such provision as extra time for completion of work, preferential seating to reduce visual and auditory distractions, individualized or extended time for testing, use of noise-reducing headphones, peer scribing and provision of class notes of teacher presentations, and campus-based counseling supports to develop compensatory coping skills are common accommodations for students with autism.

Pervasive Developmental Disorder—Not Otherwise Specified (PDD-NOS). A subcategory of autism spectrum disorder is Pervasive Developmental Disorder (not otherwise specified). This category is often reserved for young students who have not hit milestones for normal communication, social, educational, and physical development. This is a categorical non-diagnostic label often utilized in children younger than 3 years of age who display characteristics that may present as atypical autism. Children with this early diagnosis often are formally diagnosed as autistic following a re-evaluation after the age of 3 years.

Legal complaints of individuals with Autism. As with any student having a disability, the legal provisions within The Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004) does allow the courts to reimburse parents as remedy to correct deficits in the development, content, and execution of a student's individual educational plan. Parents may seek

to reach an agreement within their local school district through an impartial due process hearing accessing the state education agency to resolve a complaint with respect to the evaluation, identification, or educational services for their child (20 U.S.C. §1415 (f)(1)). States may have established either a one- or two-tiered system (20 U.S.C. §1415 (f)(1)(g). In the event of a two-tier hearing system, the local education agency will first hear the case and then an appeal may be filed with the state education agency (U.S.C. §1415 (i)(1)(A). If the school district is not upholding the agreed-upon provisions within the child's individual education plan, a parent may advance their complaint at a high court. By proceeding through the various stages within the process, parents and school districts may reach an agreement at any point. Prior to filing and action in court, the parent must have exhausted administrative due process procedures in hearings at the school district and state levels. To clarify, the IDEA provides parents with specific protection in that once a decision has been finalized through the local and state education agency, a parent may bring the complaint before a district court (U.S.C. §1415 (i)(2)(A). As a standard practice, the records from the state are reviewed and the state education agency's hearing officer's decision will be given "due weight." It is up to the District Court to explore the nature of the educational complaint and determine if procedural violations have occurred to thwart the process. Decisions made by the presiding judge may result in final decision for the plaintiff or defendant, or a remand for further development of the case prior to decision.

The literature review explains historically significant case law and judicial decisions which frame this study. The primary statute discussed was The Individuals with Disabilities Education Act (IDEA) and advancements in provisions for students with disabilities being educated in public education. Shifts in legal remedy for IDEA covered students and case

outcomes between 1983 and 2016 possibly impacting parents' receiving tuition reimbursement were explored. Possible determinants of judges' ideology were also discussed as well as judges' decisions and voting trends. The following chapter will outline the method of inquiry utilized in this study to analyze how ideological influencers affect judges' voting habits in autism reimbursement cases after the implementation of IDEA's 1997 amendments.

Judge Ideology

Federal public administrators—legislators and judges alike—are the primary formulators of national policy. Appellate courts are policy-making institutions that both refine and extend precedent through their interpretation of the constitution and statutes. The question remains regarding the extent to which judges are compelled by their ideologies to vote along partisan lines considering legal constraints.

> If judges are willing to overrule prior decisions not because they can objectively demonstrate that precedents have been eroded or are no longer relevant for the category of dispute for which they were originally designed but based on the judges' own policy preferences in the guise of their personal reading of the Constitution or statues, then the enormous emphasis placed on *stare decisis* as a cornerstone of the legal process is clearly shaken.
>
> (Goldman and Lamb, 1986, p. 3)

Researchers have systematically reviewed statutory decisions looking for indications that judges' behaviors change to meet changing political environments (Segal, 1997). McCubbins, Noll, and Weingast (1995) state that "judges do not check their political ideologies at the courthouse door" (pp. 1636, 1637). Observance (with fidelity) of this nation's substantive rules of law is an assumption when judges receive lifetime appointment to the Federal and Supreme Courts. Yet, "judges and elected politicians accord some significant weight to personal views about what the government should do and how government officials should do it and are willing to make compromises between judicial and political norms and their personal policy preferences" (McCubbins, Noll, and Weingast, 1995, p. 1637).

Judicial appointments. Judicial appointments traditionally are made from potential candidates who mirror the appointing president's political party. Successful judicial appointments are often lauded among a president's greatest accomplishments while in office. Appointed judges interpret legal intent of law to generate legal opinion that can result in the setting of legal precedents, which by nature of association is reflective of the views shared by the party of the appointing president. A chief concern about such practices was voiced by both Clarence Thomas and Antonin Scalia; they "made it clear in their opinions that separation of powers remained important, and that it was wrong for the Court to make law" (Presser, 2008, p. 431). Additionally, Judge John Roberts acknowledged during his confirmation hearings that "judges and justices are servants of the law….it is the rule of law that protects the rights and liberties of all Americans" (p. 437). "Substantial interference with state and local governments in the form of 'institutional reform litigation'" would result should judges begin legislating through their written opinions (Pulliam, 2018, p. 1).

To establish perspective for the positioning of this researcher's study, 167 Court of Appeals judges in twelve circuits (U.S. Court of Appeals, Table 1), commenced hearing 52,698 cases in 2015 and 60,357 cases in 2016 for a 14.5% annual increase in cases heard. In 2015 and 2016 respectively, 53,213 and 57,744 cases were terminated with an 8.5% annual increase in cases terminated. In 2015 and 2016 respectively, 40,662 and 43,275 cases remained pending for a 6.4% annual increase in cases pending. Within this 12-month period between September 30, 2015 and 2016, civil appeals numbered 27,837 with 10,376 terminated on procedural grounds (U.S. Court of Appeals, Tables B, B-1A). Of the cases heard, sixty-five percent arose from cases originating within the U.S. district courts. Pro se filings accounted for 71 percent of the 13,758 original proceedings and miscellaneous applications. While growth occurred in several filing

areas, civil appeals and appeals of administrative agency decisions were reduced during this period (U.S. Court of Appeals, Table 1, front matter). Given perceived partisan intentions with each judge's appointment, a president's political agenda could therefore have far reaching impacts on our nation's policies and processes.

In surveying available literature, seventy years of research has amassed considerable research on the nature of judicial decision making with political scientists and legal academics alike having determined, that serious scholarly investigation—associated with judicial vote—requires exploration of a judge's ideology (Segal & Spaeth, 2002; Keele, Malmsheimer, Floyd, & Zhang, 2009); Jessee & Tahk, 2011; Epstein, Martin, Quinn, & Segal, 2012). A meta-analysis published by Daniel Pinello (1999) reviewing 84 studies conducted between the years of 1959 and 1998 was synthesized from over 140 assorted sources of empirical data exploring the links between judicial political party affiliation and judicial ideology. Pinello's (1999) work supports that use of the binary Republican and Democratic quantification for studies addressing partisan influences on judicial ideology.

Ideology has been traditionally thought of as the most closely held values and feelings through which all actions (conscious and unconscious) are filtered. Within political arenas, a popular working definition of ideology is "the driving force of [a judge's] decisions" (Lammon, 2012, p. 244) that is inclusive of a "conception of ideology as partisan politics" (Lammon, 2012, p. 249). Lammon (2012) further reminds that "quantifying ideology…is perhaps the trickiest aspect of judicial politics research" (p. 249). Ideology, within the context of this researcher's study, is defined as "a nearly complete set of political issue preferences that is shared by others in the same political system" (Noel, 2013, p. 14). It might be counterintuitive to focus on ideology—given that our nation's legal system ascribes to the notion that judges make decisions

based on the law and not personal predilections or views. In short, judges "realize that their decisions are influenced by some extralegal factors and that their personal backgrounds and sense of justice are among those factors" (Cross, 2007, p. 16). According to Cross (2007) when describing the *ideology* of judges, one cannot deny that by the very nature of judging, the term historically encompasses aspects of both *fairness* and *justice*. A legalistic view of judging strictly by interpretation of the law surmises that judges should maintain neutrality regarding outside influencers, and certainly should not exercise their own political will from the bench when resolving disputes. Cross (2007) reminds us that judges resolve disputes between litigants, and reach decisions based on a sense of equity and fairness given the constraints of the law, with legal decisions that are contingent upon their own ideological preferences (which fall along a bipartisan continuum).

Studies specifically evaluating the voting habits of judges in the U.S. Court of Appeals (Goldman, 1966; Howard, 1981; Humphries & Songer, 1999; Smith & Tiller, 2002; Solimine, 1988; Songer & Haire, 1992; Tauber, 1998; Unah, 1997; Yung, 2010) have established the influence of judicial ideology and judges' voting at various levels of the courts. The use of "proxy variables," application of various political models, and increasing capabilities for large data set analysis has been accomplished as technology and computing advances have been realized.

Variables used in studies have often been based on observable characteristics such as a judge's race or gender (Boyd, Epstein, & Martin, 2010; Haire & Moyer, 2015; Songer, Davis, & Haire, 1994), religious affiliation (Sisk & Heise, 2012), and other aspects including educational and professional background (Fischmann & Law, 2009). Though literature reveals that there are indeed many different factors to consider when measuring judicial ideology, the prevailing and

stable indicator of judicial vote has fallen along partisan affiliation. This common design element for studying the ideology of judges, ascribes to the assignment of a judge's party affiliation according to the party of the appointing president during their judicial nomination. Epstein and King (2002) find though that "partisanship has normally been treated as a negative attribute that indicates ideological decision making" (p. 519). A constant remains in that judicial decision-making is not made in a void. Current understanding is that legislative behavior results from interplay of many complex factors, with the "existence of constraints—such as precedent and fear of reversals…or of retaliation by other branches of government—on freewheeling ideologically motivated judicial behavior" (Epstein, Landes, & Posner, 2013, p. 66). Goldman and Lamb (1986) find that in a culture that places great value for *stare decisis*, an appellate judge will dissent when advocating for traditional legal doctrine amidst shifts of policy during their tenure. When faced with overturning precedent, a pattern of increased dissents is found (p. 124).

Scholars have found that appellate and district court judges appointed by Democratic presidents cast more liberal votes than judges appointed by Republican presidents. Conversely, judges confirmed by Republican presidents vote more conservatively than their Democratically-appointed counterparts (Cross, 2007; Pinello, 1999; Songer & Haire, 1992). While ideology itself does not equate to partisan politics, judges possess a personal ideology incorporating ideological preferences stemming from entrenchment in our nation's two-dimensional liberal and conservative party structure. This does not infer that judges are judicial activists—casting votes to specifically advance political party interest—but that judges are expressing their own personal preferences with each liberal or conservative vote cast. It is impossible to equate a singular judicial vote to a decision definitively influenced by political party. However, voting trends over time can be identified through examination of a given data set.

Judicial Models

With much attention over the last thirty years given to operationalizing estimates of judges' ideological positions, three models have emerged for judicial decision-making: legal, strategic, and attitudinal. Judicial models used within analysis of lower court votes, have traditionally been utilized first in investigations researching the Supreme Court (Yung, 2013). The *legal model* holds that judges judge based on strict adherence to the law. The *attitudinal model* emphasizes that judges' decisions are influenced by their individual values and preferences. The *strategic model* combines aspects of the legal and attitudinal models in that the model assumes judges make decisions based on personal policy preferences and strategic goals within the confines of existing legal constraints (Perino, 2006). For purposes of this researcher's study the attitudinal model will be further discussed.

The Attitudinal Model. The *attitudinal model* of judicial decision making (Segal & Spaeth, 1993; Segal & Spaeth, 2002) originates as a challenge for the Legal Realist movement from the 1920s which views judges as beings without judicial discretion, resting their decisions on the plain meaning of the U.S. Constitution. The model purports that constitutionality, precedence (stare decisis), and the limited power endowed by statutes constrain judges in their decision making. Historically, the attitudinal model has been used by political scientists as a stable statistical model to estimate ideology of judges (e.g., Poole & Rosenthal, 1985, 1997; Heckman & Snyder, 1997; Clinton, Jackman, & Rivers, 2004; The "attitudinal model" posits that attitude is founded on deep-seated beliefs and that judges have policy preferences based on their beliefs. Judges' actions are homeostatic in that they "approximate as nearly as possible to those policy preferences" (Rohde & Spaeth, 1976, p. 72).

Much of what has been learned about the attitudes and voting preferences of our nation's judges has come from evaluation of the actions of U.S. Supreme Court Justices. As early as 1948, Herman Pritchett analyzes opinions of U.S. Supreme Court justices with results that challenge traditional study of legal reasoning. Pritchett observes a sharp increase in published dissents among Supreme Court Justices beginning in the 1930s. "Until then, the Justices had maintained the illusion of unity" (Epstein, Landes, & Posner, 2013, p. 67). Pritchett's early investigation of attitudes of judges serving during the Roosevelt court quantifies judicial attitude and its perceived impact on judicial vote.

Judges reveal their attitudes and preferences with the votes they cast recorded within public record and the policies they support publicized through mass media. Amassed records of the U.S. Courts system provide researchers rich data for analyzing the voting trends of judges.

Panel effects. Appeals courts judges cast votes influenced by their individual attitudes within the constraints of three-person panels (Goldman, 1966; Goldman, 1975). Yung (2010) considers influence of the circuit court judiciary to be of utmost importance with regards to "its extensive caseload and policy making authority" (p. 1137). Consideration of outside forces as possible influencers on judicial decision making has advanced the idea that judges are affected by interrelations of the three-judge appellate panels (Cross & Tiller, 1998). "Panel effects research has also been extremely valuable in breaking down the idea that judges are separate islands rendering independent decisions" (Yung, 2013, p. 1769). Perino (2006) finds that "judges' policy preferences tend to reinforce one another" (p. 512). Outcomes of appeals depend at least to a degree, on the composition of the three-person panel. Mixed or moderate ideological panels have been found to respond to strategic actions where ideological disparities are present (Perino, 2006). Yung (2013) reminds that "partisanship does not require conscious thought by a

judge" but serves as a measure of how "apt [the judge is] to defer to those of the same appointing party whether the judge is aware of it or not" (p. 1776). Clearly the concept of *panel effects* merits exploration as a force on judicial vote as a related topic of judicial ideology, but extensive discussion is beyond the scope of this researcher's study.

Baum (2017) reminds that within people identified as liberals or as conservatives, the strength of affiliation with an ideological group varies and is an element of a person's social identity. Party ideology—as a "proxy" indicative of judicial attitude—allows researchers to examine the influences of liberalism (Democratic) and conservatism (Republican) on judges' votes based on the party of their appointing president. Tiller (2002) warns, however, that superficially reading studies about judicial attitudes can lead to the conclusion that judges are influenced more by their personal ideology than by our nation's legal principles.

Notwithstanding the many important studies emanating from close evaluation of various aspects of judicial vote, inquiries have not gone without criticism. In 1998, the use of ideology as an indication of political influence on judicial vote was challenged when then Chief Judge of the U.S. Appellate Court of Washington, DC, Harry T. Edwards, warned that by selective application, the work of academic scholars can be misconstrued to the point of leading the public to misunderstand judges' actions within the court (Sisk & Heise, 2005). From his extensive review of studies—wherein judges' voting patterns are used to quantify a judge's ideology—Judge Edwards reminds that readers should not rely on ideology to possess explanatory power concerning votes cast by judges (Revesz, 1999). Hensler (1988) also warns that "[r]esearchers simply do not have available very good quantitative approaches to studying large social organization [ie., U.S. Courts] or interaction processes [ie., the influence of partisanship on judge vote]. Nonetheless, examination of judge vote (as being *liberal* or *conservative*), has prevailed as

a valid indicator of ideological preference wherein no direct measure of ideology exists (Stiles & Bowen, 2003) with studies suggesting that judges' votes are influenced by personal policy preference.

Epstein, Martin, Quinn, and Segal (2012) caution that condensing ideological examinations into a quantifiable space is indeed problematic at best. Epstein, et al. (2012) warns that "four troublesome assumptions" emerge when researching judicial ideology that must be considered. The first assumption is that all Democratic presidents and judges vote in a liberal direction and conversely, all Republicans vote conservatively. Evaluations of ideologies of presidents have proven that a continuum of both liberalism and conservatism exists wherein some Democrats and Republicans look very similar ideologically (Giles, Hettinger, & Peppers, 2001; Songer & Haire, 1992).

A second assumption is that all presidents are inclined to appoint judges mirroring their own ideological preferences. Notwithstanding, to date, judicial appointments have continued to move towards establishment of a diverse pool of judges (occurring particularly during the Reagan, Carter, Bush, and Clinton administrations) with appointments of more females (Boyd, Epstein, & Martin, 2010), as well as judges of Asian and Hispanic descent (Haire & Moyer, 2015). The Clinton administration supported appointment of judges which were representative of America's demographics.

Ideological drift. A third assumption is to presume that, over the course of tenure on the bench, a judge's ideology remains constant. Martin and Quinn (2000) as well as Epstein, Martin, Quinn, and Segal (2007) contribute to the literature with studies supporting *ideological drift* (Balkin, 1993) or *ideological divergence* (Epstein, Landes, & Posner, 2013) finding that movement has been identified in the span of career votes of Supreme Court justices. Balkin

(1993) reminds that "political and moral consequences…programs, and theories change radically over time" (p. 869). Literature shows increases in "the gap between the ideology of a [Supreme Court] justice and the ideology of the President who appointed him [tends] to widen with the length of the Justice's service" (Epstein, Landes, & Posner, 2013, p. 117). It would be naïve to believe that U.S. Appellate Court judges would be any different in their voting habits, as one half of the Supreme Court justices have served as district and appellate court circuit judges (Cohen, 1992). Judge Harry T. Edwards reflects on his own scholarship and is quoted as saying, "I have learned a lot over the years as I have probed different areas of interest. I would like to think that my intellectual interests and capacities have continued to grow" (Collins, 2016, p. 254); this adheres to the premise that individuals are not static beings, but dynamic in their capacity for growth and change.

Senatorial courtesy. The fourth assumption is that, within a party-based system, judges' nominations are controlled by the President. This discounts a common unwritten policy called *senatorial courtesy*, wherein the justice nominations by the President are constrained by Senators of the opposing party through various means; the judicial appointee is only confirmed when no objection is voiced by the appointee's home state senior senators from the same party as the appointing president (Giles, Hettinger, and Peppers, 2001; Jacobi, 2005). Given that the U. S. Constitution does not address notions of judicial ideology or "who bears the burden of proving a nominee fit or unfit for judicial office" (p. 435), Presser (2008) reminds that the Senate considers it necessary to "'balance' ideologies on the benches of the lower federal courts and of the Supreme Court" (p. 434). Presidents historically have filled judicial vacancies in the lower courts from candidates selected as being identified from the same political party (Solimine, 1988). Though this tacit agreement is nonbinding, senatorial approval is actively sought by presidents to

declare political patronage and substantiate the character and general qualifications of the judicial candidate. Receiving senatorial approval for nomination of a judge to a court indicates a matching of political party affiliation between the president, senator, and judge.

Judicial metrics. Despite valid concerns about the validity and reliability of various ideological measures, political scientists have continued to seek the best means to quantify judicial ideology. Metrics have continued to make headway as methods advance to capture the nuances of voting habits of legislators and judges alike. Lammon (2012) reminds that an enduring challenge is found in "quantifying the variables in a manner that can be empirically tested" (p. 248). As a result, empirical study of circuit judges in the last fifty years has been dominated with use of "proxies" to gauge legal and attitudinal influences on legal decisions with the most pervasive measure utilized being political party of the appointing president (PAP) to predict judicial ideology. Three commonly used measures for numerically assigning a score of liberalism/conservatism within a study for a "proxy" such as party of the appointing president that emerge from the literature merit discussion. Additionally, two databases that have proven useful for quantifying judicial partisanship require review.

Segal-Cover scores. Segal-Cover scores (1989) are devised by analyzing newspaper editorials published post- 1953 for articles published within the time between a judge's nomination to their confirmation. The editorials used are published within The New York Times, Washington Post, Chicago Tribune, Los Angeles Times, St. Louis-Dispatch, and The Wall Street Journal. Each judicial nominee receives two scores: *qualifications*, where 0 indicates "unqualified" and 1 means "extremely qualified;" and *ideology*, where 0 means "most conservative" and 1 means "most liberal." The overall political ideology is calculated by subtracting the number of paragraphs coded as conservative from those coded as moderate,

liberal, or conservative. Coding is primarily completed by trained university students. The resulting scores range from 0 (conservative) to .5 (moderate), to 1 (liberal). The Segal-Cover scores have been shown to be highly correlated with later votes of justices. This measure is of value for present-day studies because of high reliability regarding assignment of ideological values for Supreme Court justices between the years of 1937 and 2017.

Martin-Quinn scores. Most studies seeking to predict voting patterns of the U.S. Supreme Court Justices have made use of a dynamic measure developed by Andrew D. Martin and Kevin Quinn (hereafter referred to as "Martin-Quinn scores"). The Martin-Quinn scores are calculated by analyzing votes cast for each term served by U.S. Supreme Court Justices from October 1937 through October 2016 (Martin & Quinn, 2002). The "theoretically unbounded" data set assumes that the votes of justices can be captured numerically each term to assign liberal or conservative ranking and are reflective of ideological changes over time (Epstein, Martin, Quinn, & Segal, 2012). The *Justices' data set* contains ideal point estimates among other calculations useful to researchers, while the *Court data set* provides estimates for the location of the median justice. This term-by-term data set has been shown to be descriptively accurate for researchers seeking to address partisan aspects requiring scores of the median justice, among others.

U.S. Supreme Court judicial database. In the late 1980s, political scientist and law professor Harold J. Spaeth created the U.S. Supreme Court Judicial Database. This database continues to be significant to researchers because it contains hundreds of pieces of information for each case sampled, including liberal or conservative designation for the Court's decision and for each justice's vote. Further, the reliability of his methods allows for replication of his results.

Spaeth's operational definitions of *liberalism* and *conservatism* remain popular for researchers exploring partisan judging (Epstein, et al., 2012):

> "Liberal" decisions or votes are those in favor of defendants in criminal cases; of women and minorities in civil rights cases; of individuals against the government in First Amendment, privacy, and due process cases; of unions over individuals and individuals over businesses in labor cases; and the government over businesses in economic regulation. "Conservative" decisions and votes are the reverse. (p. 714)

Though his definitions for *liberalism* and *conservatism* are widely applied, in recent years, Spaeth's coding system has been criticized in that the complexity of many of today's cases do not easily fit into his binary coding of liberal or conservative (Lammon, 2012). Nonetheless, Spaeth's database is foundational to much of the work accomplished in the analysis of judges' voting habits.

U.S. Court of Appeals database—"Songer" database. Donald Songer (2006) created a database to support ongoing empirical analysis utilizing a random sample of U.S. Court of Appeals cases. Descriptive data contained within the database include category of issue, constitutional aspects, procedural basis, and statutory relevance, as well as the vote of the judges, and certain litigant characteristics. The variables available are categorized by case characteristics, issues, participation, judges, and votes. Information was gathered from published opinions reported in the Federal Reporter for circuit years between 1925 and 1988. The work is publicly available and maintained by the National Archive of Criminal Justice Data (NACJD). The Songer Database has not been widely used for research addressing "ideology, activism, independence, and partisanship" (Yung, 2013, p. 1767).

DW-NOMINATE Measure scores. NOMINATE (**Nomina T**hree-step **E**stimation) Common Space Score (Poole & Rosenthal, 1997; Poole, 1998) places Supreme Court justices and their Court of Appeals counterparts along a continuum of partisan scores ranging from most liberal to most conservative in voting preference. This establishment of the numerical ideal point (Fischmann, 2011) for each legislator permits quantitative evaluations of votes along partisan lines. According to Carroll, Lewis, Lo, Poole, and Rosenthal (2009), this reliable measure of ideology has advanced through the years and can be reliably used in analysis such as has been undertaken by this researcher. The **D**ynamic, **W**eighted **Nomina T**hree-step **E**stimation (DW-NOMINATE Measure score) is "a FORTRAN program that estimates a probabilistic model of binary choice (yes or no) of legislators in a parliamentary setting over time." McFadden (1976) developed this random utility model, which has been used to analyze votes of the U.S. House and Senate over time, with a "term" being confined to a two-year term in Congress. The DW-NOMINATE Measure score, developed in 1996, advanced the NOMINATE procedure in a dynamic way to capture voting of House and Senate Members. It is indexed by integers and is a complex, nonlinear estimation with Pearson correlations of over 0.95. The assigned Senatorial values used within this researcher's current study were achieved through a bootstrap procedure of roll call votes taken within the U.S. Senate. Unlike NOMINATE scores, DW-NOMINATE Measure scores are based on a normal distribution of errors rather than logit errors, with each dimension possessing a distinct weight. The DW-NOMINATE scores achieved through this methodology have been unparalleled. To date, work continues to occur to further advance this methodology. Londregan (2000) has generated a method of producing legislator ideal points and cutting planes very similar to the work produced by NOMINATE (Poole, 2000) though limited reference within literature to this method is found.

The Judicial Common Space (JCS) Score (title adapted from Keith Poole's work on the NOMINATE Common Space Measures) provides a score for judges of lower courts and justices of higher courts within the same policy space. This model allows for exploration of interactions between courts (instances of compliance / defiance). The model was developed through positive political theory (PPT) scholarship on the hierarchy of justice (Epstein, Martin, Segal, and Westerland, 2007).

The DW-NOMINATE Measure score is used within this researcher's study. This dynamic measure allows generation of a numerical value for each U.S. Court of Appeals judge via proxy of party of the appointing president. Assigned values within the DW-NOMINATE data base for each Senator and President—situated within a liberal to conservative continuum which are based upon roll-call votes—are used to calculate a numerical score for each appellate judge. Coding for the judge's year of confirmation, appointing president and home-town senators of the same party provide a determination of judicial liberalism or conservatism with scores ranging between 0 and 1 (0 being most liberal and 1 being most conservative). With each appellate case being heard by a panel of three judges, this allows for collection of three data points for each case appealed by parents of students with autism seeking tuition reimbursement. Thus, the data base for this study is inclusive of case-based descriptive data necessary for calculation using DW-NOMINATE scores. With a finite amount of cases filed on behalf of children with autism whose parents seek tuition reimbursement, this research fills a gap in knowledge. Jessee and Tahk (2011, p. 524) remind that "we can learn much about the ideology of justices from relatively few votes."

For parents of students with autism who seek tuition reimbursement, appellate judges are usually the arbiters of the court of last resort for recovering expenses. Parents seek to recover

educational expenses by pursuing lengthy appeals in hopes of finding recourse through established appellate court procedures. Segal (1997) states that "Judges…are interested in imposing their policy preferences on society" (p. 28). If appellate judges' actions are based not on strict interpretation of the law for provision of FAPE, but on conservative predilections assuring a vote in favor of school districts, then parents will not prevail in their efforts to recover expenses. For plaintiffs who have been denied FAPE, appellate judges have clear legal indication for granting relief. Where discretionary review is favorable, parents hope for a three-judge panel that will vote in a liberal direction in their favor. Given the research indicating educational benefit of specialized supports for children with autism, the weight of parents' financial hardship may have some effect on the inclinations of liberal judges to grant reimbursement. It should be emphasized that it is not the responsibility of the court to grant reimbursement when financial hardship is indicated if FAPE has not been denied.

CHAPTER 3: METHODOLOGY

The purpose of this study was to determine the effects of judges' ideologies on their voting behaviors in post-June 4, 1997 tuition reimbursement cases appealed in the United States on behalf of students with autism. This dissertation attempted to determine if votes in the Court of Appeals can be reasonably predicted by a judge's political party affiliation as "proxied" by the party affiliation of the judge's appointing President or a proxy obtained by averaging Senatorial and Presidential DW-NOMINATE Measure scores. This chapter is divided into three sections. The first section discusses the research design and methodology. The second section describes the data analyses through a review of the tables. The third section contains specific commentary on the analysis of the data sets.

Research Design

This study investigated the predictive value of 1) party of the appointing president; and 2) DW-NOMINATE Measure scores on the individual U.S. Appellate Court judges' individual voting in IDEA tuition reimbursement cases decided by the U.S. Appellate Court between 1983 and 2016. Delineation between pre- and post-1997 IDEA Amendments allows for investigation as to the impact of legislation on vote and help to frame the investigation.

Database Construction

Fischmann and Law (2009) warn that "the way that case outcomes and ideology are measured can have a large impact on the results of a study" (p. 22). Therefore, care has been taken in the selection and coding of the cases included. The data sets for the analyses for this study were collected from Westlaw databases with a narrowing of parameters to include all U.S. Appellate Court case decisions between January 1983 and August 2016 concerning students with autism spectrum disorders. The search was necessarily limited to decisions after December 31,

1982 appearing in the U.S. Court of Appeals wherein the earliest tuition reimbursement case with the identifier "autism" had been located. Specific search parameters used within the Westlaw database were "autism," "special education," "reimbursement," and "ed law rep." In a preliminary search of the Westlaw database, 123 potential appellate court documents were identified for 369 appellate judges' votes for possible inclusion in this research. A legal case's inclusion in this study was determined by the date of the decision as having been between January 1983 and August 2016; 2) the complaint must have been on behalf of a student with autism or a related subcategory falling under the autism spectrum disorder; 3) the case included consideration of reimbursement for educational expenses under the IDEA. Possible reimbursements included 1) services; 2) educational materials; 3) programmatic staff salary; 4) educational programs of a highly specified nature (such as Lovaas Therapy and Applied Behavior Analysis); 5) private school placement; 6) residential school placement; 7) counseling; 8) occupational therapy; 9) physical therapy; 10) mobility and orientation therapy; 11) cognitive/behavioral therapy; 12) speech therapy; 13) travel expenses; and 14) room and board expenses.

Case-level variables. Multiple variables (see Figure 3) were explored within the initial phase of this study to explore relationships between the potential influences on U.S. Court of Appeals judges' ideology and the decisions rendered in autism tuition reimbursement cases between January 1983 and August 2016.

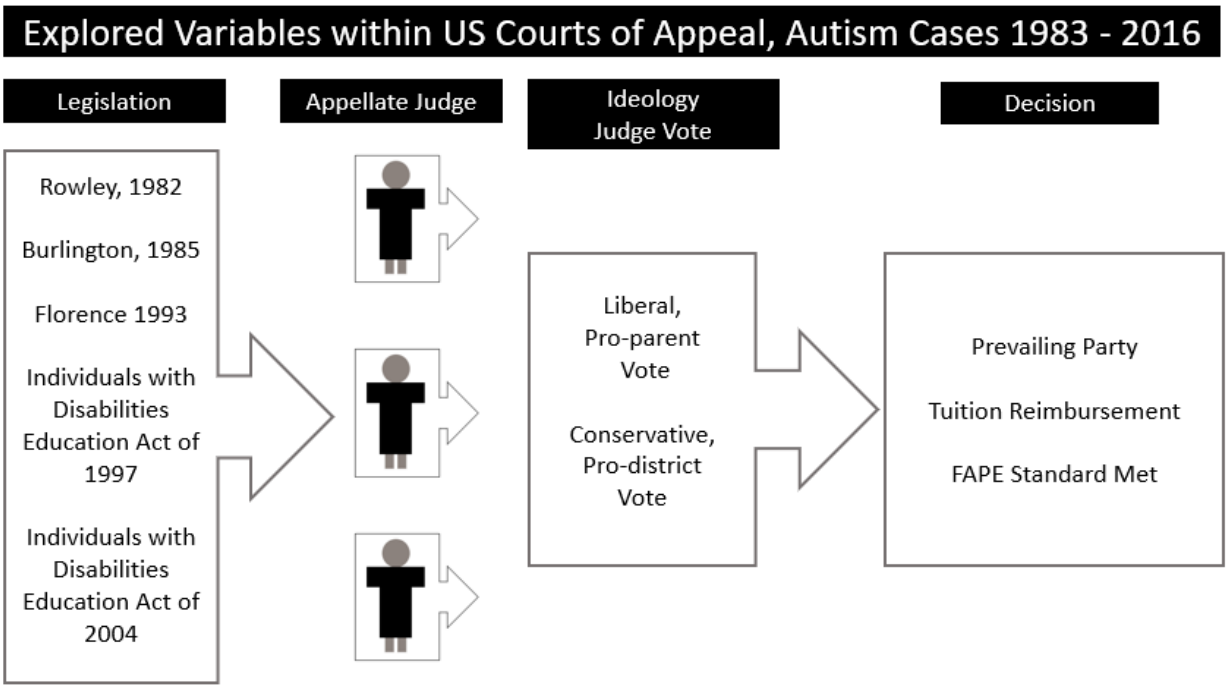

Figure 1. Potential Variables in Autism Tuition Reimbursement Cases, US Court of Appeals, 1983 - 2016

Judges' variables. Each decision was read to locate the names of the three appellate judges (JUDGENAME) on the panel. Data sets for the appellate court judges were developed from information acquired from the Federal Judicial Center (FJC) (2016). Biographical information assembled for inclusion in the data set included the judge's name (JUDGENAME), home state (STATE) at the time of appointment, and year of birth (BIRTHYEAR). This information was verified through the website of each of the U.S. Circuits which house biographical profiles of each of their judges. Missing information was sought through individual internet searches specific to the nature of the missing information. Online biographical sources such as Judgepedia (http://judgepedia.org/index.php/Main_page) and The Judicial Research Initiative (Songer Database) housed at the University of South Carolina (http://www.artsandsciences.sc.edu/poli/juri/databases.htm) was also utilized.

An example of steps that were taken to acquire missing information is exemplified through efforts to determine the state associated with each judge. For the variable of "judge's practicing state," coding was deduced using the following method. Where the FJC data base did not specify the home or nominating state for a judge, the state affiliated with the judge's employment at the time of nomination was considered. If a judge had maintained strong ties to their birth state, often with an established law practice in that state, the records were evaluated to determine the value of using this as a determinant of their associated state.

The judge's date of confirmation (CONFIRMDATE) to the U.S. Appellate Court as well as the appointing president (PRESIDENT) was gathered from the FJC data base as well. Dates were listed as "mm/dd/year." The age of the judge (JUDGEAGE) at time of decision was calculated utilizing their birth year and the year of the applicable case's decision for determination of the judges' numerical ages to be listed as "xx". The gender (JUDGEGEN) of each judge was coded as well with 0=Male, 1=Female.

The date of confirmation was used to locate within the DW-NOMINATE Measure score's data set the corresponding score of liberalism or conservatism of the appointing President (PRESDW). Within that confirmation year, the names of senators of same party affiliation as the appointing president were identified ranging between 0 and 3 senators and entered under SEN1NAME, SEN2NAME, SEN3NAME. The corresponding DW-NOMINATE Measure score for identified same party senators was entered under SEN1DW, SEN2DW, and SEN3DW respectively corresponding to their assigned number by name.

The date of each decision (DECISIONDATE) was utilized in several ways: 1) to calculate the age of the judge at time of decision; 2) to determine the length of time from perceived FAPE violation until legal resolution of the case; 3) to calculate the number years on

the Appellate bench from judge's time of appointment to decision; and 4) to establish along a time continuum the case's relationship to precedential litigation and implementation of key statutes as possible influencers on judicial vote.

Decision variables. Dependent variables that address the three prongs of IDEA provisions (appropriate IEP, FAPE denied, and appropriate placement were coded. Each judges' vote was coded for determination of 1) denial of FAPE (FAPEDENIED), with 0=No, 1=Yes; 2); designation of the public school's offered IEP being deemed as appropriate (IEPAPPROP), with 0=No, 1=Yes; and 3) placement/treatment deemed appropriate (PLACEMENTAPPROP) with 0=No, 1=Yes. "Appropriate" was defined as having met IDEA legal parameters guiding local determination as meeting the FAPE for individual education planning and placement for service delivery. Additionally, the document was reviewed to determine if parent procedural violation (PROCVIOL) occurred with 0=No, 1=Yes. A *parent procedural violation* may have included 1) a parent's not meeting due process requirements for administrative exhaustion within lower courts prior to petitioning a higher court. A parent procedural violation might also include 2) a parent's not meeting timelines, 3) not authorizing and 4) not presenting their child for assessment, or 5) unilaterally withdrawing to enroll in private placement without notification or discussion for planning with the public school district.

An *inappropriate IEP* has been defined as a document found deficient in meeting the needs of the child. More specifically, the document may be 1) lacking in specificity of services, 2) devoid of supplemental aids, 3) without clearly defined goals and 4) deficient in establishing parameters for determining attainment of set goals. Among others, the document may have been 5) developed devoid of parental input, 6) without proper committee participation, or 7)

incompletely implemented. Additionally, the plan may be found deficient due to 8) being completed in an untimely manner, or 9) implemented in an untimely manner.

FAPE denial was defined as a public school's 1) lack of provision of an education at no cost to parent,2) lack of education in the least restrictive setting possible with non-disabled peers, 3) not providing evaluations and testing in areas of disability, 3) inadequate development of an IEP containing goals which designate type, duration, frequency, and public school person responsible for overseeing delivery of service, as well as expected level of achievement to designate attainment of goal, 4) lack of implementation of IEP specified services or aids, 5) lack of extended year services, related services, or supplemental provisions such as tutoring wherein designated within the IEP, 6) lack of alignment to appropriate grade level State academic content standards, and 7) untimely completion of any mandated action as outlined by state and federal due process guidelines.

The decision of each judge was coded to note those of dissenting opinion (DISSENT) as follows: 0=No, 1=Yes. The vote of each judge (JUDGEVOTE1) was coded as in favor of/prevailing party, with 0=Board of Education, 1=Parent/Student to create one of the two dependent measures. If the case was remanded (REMAND), the decision was considered in favor of the parent as prevailing for further pursuit of the issue, unless the opinion clearly indicated for remand with the decision favoring the Board of Education/Public Representative (REMANDBOE). The creation of (JUDGEVOTE2) allowed for the second dependent variable accounting for judge votes excluding remands.

Each legal case was analyzed to determine if the U.S. Appellate Court's decision resulted in a full decision thus resolving the case (RESOLVED), and was coded 0=No, 1=Yes.

The legal case was read for a decision in favor of the parent for reimbursement (TUIREIM) with 0=No, 1=Yes. If a decision was not in favor of the parent PARBOE WITH 0=BOE, 1=Parent, the case was analyzed to determine if parent procedural violation predicated the decision (PARPROCVIOL) with 0=No, 1=Yes. Conversely, a procedural violation by the public education system (BOEPROCVIOL) (as a predictor to a judge vote in favor of the parent) was noted with 0=No, 1=Yes.

Several types of descriptive information were gathered. The nominal data included the type of reimbursement (REIMTYPE) 0=private school, 1=specific program, 2=extended year services (summer school), 3=sought by the parent such as private school tuition, residential school, compensatory education and supplemental private services such as occupation, physical, and speech therapy. Additionally, if a court decision listed specific programmatic attributes (such as Lovaas Therapy and Applied Behavioral Analysis), this was noted for possible further analysis. The location of the service's provision (SVCLOC)—specifically if a home-based intervention—was noted, with 0=private school and 1=home-based instruction. Ultimately these were identified, analyzed, sorted for categorization, and assigned expanded numerical values to aid in analysis.

Precedential decisions variables. The individual reimbursement cases were coded for their relationship to two key dates within this research. The case's year of decision was utilized to determine whether the decision occurred after the following precedential cases: 1) Burlington, 1985; and 2) Carter, 1993, with a binomial determinant of 0 = No, and 1=Yes based on each case's year of decision.

The legal cases were also coded for their relationship to two key dates of U.S. statutes: 1) Individuals with Disabilities Education Act, June 4, 1997; and 2) Individuals with Disabilities

Education Improvement Act of 2004, implementation date July 1, 2005. Each decision was assigned a binomial determinant if the decision was made after the Acts' implementation date with 0 = No, and 1=Yes, based on each case's year of decision.

Judge political party affiliation variable. An initial task in coding the independent variables was the determination of the ideology of the appellate judge which will be assigned via proxy of the party of the appointing president (PARTY). Each of the three appellate judges will be assigned a corresponding value according to their party with 0=Republican/Conservative (R/C) or 1=Democrat/Liberal (D/L).

DW-NOMINATE Measure scores variable. Another independent variable within this study is the use of DW-NOMINATE Measure score as a proxy for ideology of each of the appellate judges. The DW-NOMINATE Measure scores were identified for the appointing President and each Senator of the same political party corresponding to the state location of the Appellate Court Judge seated on each autism reimbursement case. Where two or more Senators of the same political party were found—based on the judge's year of appointment to the Appellate Court—the average score of the two Senators and the President was calculated. The resulting average of DW-NOMINATE Measure scores was assigned to each judge to serve as an independent variable within the study. The corresponding label for the DW-NOMINATE Measure scores was labeled as *Presidential score, Senator 1 score, Senator 2 score,* and *Weighted Average score.* Figure 4 displays the associated study variables utilized in analyses and presented in the tables.

Table 3

Analyses Study Variables

Variable	Identifier	Determinant
Dependent	Pro-Parent, liberal or Pro-district conservative Vote of Judge: All Votes Included	Decision Result
Dependent	Pro-Parent, liberal or Pro-district conservative Vote of Judge: Remanded Votes Excluded	Decision Result
Independent	Party-of-appointing President	Broad Categorization for Partisan Influence
Independent	DW-NOMINATE Measure Score	Refined Value for Partisan Influence
Independent	Decision After IDEA 1997 Amendment	Legal Influence

Chapter 3 Summary

All analysis was conducted using SPSS version 24 (2016). Descriptive quantitative data were analyzed using percentages, mean, and standard deviation, presented through frequency tables. Key legislation, proxies for judicial ideology as liberal or conservative, and possible appellate court case outcomes were explored. The inferential statistics were completed using binomial logistic regression. Due to the attributes of the data, a binomial logistic regression was used to achieve the desired analyses to discuss outcomes for this study. The data are largely binary (dichotomous) and the goal was to explore the influence of the categorical independent variables on the dependent variables. The Wald chi-square statistic was employed to test individual independent variables as predictors. The predictors with a p-value of 0.05 or smaller were considered significant. To determine the goodness of fit, the Cox and Snell R Square as

well as the Nagelkerke R Square tests were used to indicate the level of how well the model fits with the actual outcomes.

The results of the study are largely presented through descriptive and binary logistic regression tables. Accuracy of encoding has been confirmed by fellow doctoral students through examination of the appellate decisions and entry of variables into the SPSS database. The items have been cross-checked by the researcher through a secondary separate examination of the decisions and confirmation of correct entry into the database. Descriptive analysis allowed for identification of missing data.

CHAPTER 4: RESULTS

Descriptive Analyses

This chapter examines the results for the descriptive and inferential analyses performed on the 387 votes cast in autism tuition reimbursement cases included in the database. Data collected on court of appeals judges' voting in tuition reimbursement cases were brought under the Individuals with Disabilities Education Act (IDEA) involving children with autism spectrum disorder for the period between January 1983 and August 2016.

Table 5 through Table 10 contain descriptive data showing the relationship between the independent variables of interest—political ideology (measured by party of the appointing president) and judges' DW-NOMINATE Measure scores (scaled from -1 (most liberal) to +1 (most conservative)) and the 1997 amendments to the IDEA (pre- and post-1997) and the dependent measure—judges' voting (liberal or conservative). Votes considered pro-parent are categorized as "liberal" and those favoring the school district are classified as conservative. Judges' voting is characterized in two ways. The first treats judges' votes as pro-parent where tuition was expressly awarded to the parent or the parent achieved a remand to the lower court for further proceedings. Under the second scenario remands are excluded from consideration thereby leaving only decisions where either the parents or school district achieved an outright victory.

Tables overview. Table 5 through Table 10 contain cells indicating the frequency and percent of votes associated with each independent variable and the two approaches to treating court of appeals judges' voting behavior. Table 7 through Table 10 contain the inferential statistical analyses of the variables of interest. These tables contain the results of logistic regression analyses of the effects of ideology and the 1997 IDEA amendments on judges' voting

with or without the remands being considered. The logistic regression analyses which were performed in this study are summarized in Table 4.

Table 4

Logistic Regression Analyses

	Independent Variable 1	Independent Variable 2	Dependent Variable
Table 11	judges' ideology: party of the appointing president	1997 IDEA amendments (pre- and post-June 4, 1997)	judges' votes with remands included and coded as liberal or conservative
Table 12	judges' ideology: party of the appointing president	1997 IDEA amendments (pre- and post-June 4, 1997)	judges' votes with remands excluded and coded as liberal or conservative
Table 13	judges' ideology: DW-NOMINATE Measure score	1997 IDEA amendments (pre- and post-June 4, 1997)	Judges' votes with remands included and coded as liberal or conservative
Table 14	judges' ideology: DW-NOMINATE Measure score	1997 IDEA amendments (pre- and post-June 4, 1997)	judges' votes with remands excluded and coded as liberal or conservative

Table 5 shows the distribution of the 387 votes in the database which includes remanded decisions. Votes are categorized as liberal or conservative. The percentage displayed adjacent to the quantities in the table, indicate the votes cast by Republican-appointed and Democratic-appointed justices. Of the 387 votes, 165(42.6%) were cast by Democratic judge. Of the Democratic judge votes, 88 (53.3%) were liberal, pro-parent. Of the 222 Republican judge votes, 86 (38.7%) were liberal, pro-parent. Liberal votes in favor of tuition reimbursement accounted for 174 (45%) of the 387 votes. Between Democratic and Republican party appointees the

Democrats voted 14.6% more often in a liberal, pro-parent direction. This finding was expected based on trends within existing research. Further exploration through performance of a logistic regression may provide more information to explore these findings.

In Table 6, all remanded decisions were excluded leaving 240 votes for review. Of these 107 were cast by Democratic appointees of which 42 (39.3%) were liberal, pro-parent. Of the 133 Republican judge votes, 36 (27.1%) were cast in a liberal, pro-parent direction. Between Democrat and Republican appointees, the Democrats voted 12.2% more often than did their Republican counterparts in a liberal, pro-parent direction. This finding was expected based on trends within existing research. As reported later in this chapter, use of logistic regression analysis enabled further examination of these findings.

Table 5

*Frequency and Percentage of Liberal and Conservative Votes Cast in IDEA Tuition Reimbursement Decisions Involving Students with Autism between 1983 and 2016 in United States Court of Appeals as a Function of Judges' Ideology as Measured by Party of The Appointing President**

Party Ideology	Liberal	Conservative	Total
Democrat	88 (53.3%)	77 (46.7%)	165 (100.0%)
Republican	86 (38.7%)	136 (61.3%)	222 (100.0%)
Total	174 (45.0%)	213 (55.0%)	387 (100.0%)

*Votes favoring tuition reimbursement or ordering a remand are coded as liberal

Table 6

*Frequency and Percentage of Liberal and Conservative Votes Cast in IDEA Tuition Reimbursement Decisions Involving Students with Autism between 1983 and 2016 in United States Court of Appeals as a Function of Judges' Ideology as Measured by Party of The Appointing President**

Party Ideology	Liberal	Conservative	Total
Democrat	42 (39.3%)	65 (60.7%)	107 (100.0%)
Republican	36 (27.1%)	97 (72.9%)	133 (100.0%)
Total	78 (32.5%)	162 (67.5%)	240 (100.0%)

*Votes favoring tuition reimbursement are coded as liberal and remands are excluded from this analysis

Table 7 and Table 8 contain a frequency distribution and related percent of liberal and conservative votes in autism tuition reimbursement decisions as a function of judges' DW-NOMINATE Measure scores which range from 1.000 to -1.000. Each interval of 1 is sub-divided into a range with .200 increments. Zero is neutral. Table 7 likewise possesses the frequency distribution of votes according to the continuous scale of the DW-NOMINATE Measure scores but excludes all votes resulting in a remand decision.

Table 7 shows that among the 387 votes cast, 174 (45.0%) were made by judges classified as "liberal" (between 0 and -1) on the DW-NOMINATE Measure score whereas 213 (55.0%) of the judges were classified as "conservative" (between 0 and 1). Among the "liberal" judges, 83 (47.7%) voted pro-parent, pro-tuition reimbursement whereas 91 (52.3%) of this group voted pro-school district. Among the "conservative" judges, 79 (46.7%) voted liberal, pro-parent whereas 134 (53.3%) of this group voted pro-school district. Thus "liberal" classified appointees voted 6.6% more often in favor of tuition reimbursement than did the "conservative" classified judges.

Table 8 shows that among 240 votes cast (remands excluded), 78 (32.5%) were made by judges classified as "liberal" (between 0 and -1) on the DW-NOMINATE Measure score

whereas 162 (67.5%) of the judges were classified as "conservative" (between 0 and 1). Among the "liberal" judges, 43 (55.1%) voted pro-parent, pro-tuition reimbursement whereas 35 (44.9%) of this group voted pro-school district. Among the "conservative judges, 67 (41.4%) voted liberal, pro-parent whereas 95 (58.6%) of this group voted pro-school district. Thus "liberal" classified appointees voted 13.7% more often in favor of tuition reimbursement than did the "conservative" classified judges.

Within Table 7 and Table 8 use of the more finite measure of DW-NOMINATE Measure score demonstrate apparent differences between liberal and conservative vote which appear to be meaningful. Further analyses through use of logistic regression may clarify as to the level of significance, if any, in accounting for these differences.

Table 7

*Frequency and Percentage of Liberal and Conservative Votes Cast in IDEA Tuition Reimbursement Decisions Involving Students with Autism between 1983 and 2016 in United States Court of Appeals as a Function of Judges' Ideology as Measured by DW-NOMINATE Measure Scores**

	Vote		
DW-NOMINATE Measure Score	Liberal, Pro-parent	Conservative, Pro-district	Total
1.000 or greater	0 (0.000%)	0 (0.000%)	0 (0.000%)
0.800 to 0.999	0 (0.000%)	0 (0.000%)	0 (0.000%)
0.600 to 0.799	22 (34.920%)	41 (65.080%)	63 (100.000%)
0.400 to 0.599	25 (52.083%)	23 (47.917%)	48 (100.000%)
0.200 to 0.399	20 (33.333%)	40 (66.667%)	60 (100.000%)
0.000 to 0.199	17 (36.170%)	30 (63.830%)	47 (100.000%)
Sub-total Vote > 0	84 (38.532%)	134 (61.468%)	218 (100.000%)
-0.000 to -0.199	7 (50.000%)	7 (50.000%)	14 (100.000%)
-0.200 to -0.399	67 (55.833%)	53 (44.167%)	120 (100.000%)
-0.400 to -0.599	16 (45.714%)	19 (54.286%)	35 (100.000%)
-0.600 to -0.799	0 (0.000%)	0 (0.000%)	0 (0.000%)
-0.800 to -0.999	0 (0.000%)	0 (0.000%)	0 (0.000%)
-1.000 or less	0 (0.000%)	0 (0.000%)	0 (0.000%)
Sub-total Vote < 0	90 (53.254%)	79 (46.746%)	169 (100.000%)
Total Votes with Remands	174 (44.961%)	213 (55.039%)	387 (100.000%)

* Votes favoring tuition reimbursement or ordering a remand are coded as liberal

Table 8

*Frequency and Percentage of Liberal and Conservative Votes Cast in IDEA Tuition Reimbursement Decisions Involving Students with Autism between 1983 and 2016 in United States Court of Appeals as a Function of Judges' Ideology as Measured by DW-NOMINATE Measure Scores**

	Vote		
DW-NOMINATE Measure Score	Liberal, Pro-parent	Conservative, Pro-district	Total
1.000 or greater	0 (0.000%)	0 (0.000%)	0 (0.000%)
0.800 to 0.999	0 (0.000%)	0 (0.000%)	0 (0.000%)
0.600 to 0.799	7 (18.421%)	31 (81.579%)	38 (100.000%)
0.400 to 0.599	9 (31.034%)	20 (68.966%)	29 (100.000%)
0.200 to 0.399	7 (24.138%)	22 (75.862%)	29 (100.000%)
0.000 to 0.199	12 (35.294%)	22 (64.706%)	34 (100.000%)
Sub-total Vote < 0	43 (39.091%)	67 (60.909%)	110 (100.000%)
-0.000 to -0.199	6 (66.667%)	3 (33.333%)	9 (100.000%)
-0.200 to -0.399	28 (36.364%)	49 (63.636%	77 (100.000%)
-0.400 to -0.599	9 (37.500%)	15 (62.500%)	24 (100.000%)
-0.600 to -0.799	0 (0.000%)	0 (0.000%)	0 (0.000%)
-0.800 to -0.999	0 (0.000%)	0 (0.000%)	0 (0.000%)
-1.000 or less	0 (0.000%)	0 (0.000%)	0 (0.000%)
Sub-total Vote > 0	35 (26.923%)	95 (73.077%)	130 (100.000%)
Total Votes with Remands Excluded	78 (32.500%)	162 (67.500%)	240 (100.00%)

**Votes favoring tuition reimbursement will be coded as liberal and remands are excluded from this analysis

Table 5 includes frequency distribution and related percentage for the 174 liberal and 213 conservative votes in autism tuition reimbursement decisions as a function of pre- and post-1997 IDEA amendments. Remands were included in this analysis.

During the pre-1997 amendments period, 14 (53.8%) of the 26 votes cast were in a pro-parent, liberal direction, whereas during post-1997 timeframe 160 (44.3%) of the votes were liberal, pro-parent. This resulted in a 9.5% decrease in liberal, pro-parent voting compared to the earlier period. Based on this calculation in post-1997 filings, parent as plaintiff in autism reimbursement cases heard post-1997 resulted in fewer wins for parents' efforts in recouping autism educational expenses. The decrease in percentage of liberal vote suggests that the implementation of IDEA 1997 Amendments impacted appellate judges' decisions.

Table 9

*Frequency and Percentage of Liberal and Conservative Votes Cast in IDEA Tuition Reimbursement Decisions involving Students with Autism between 1983 and 2016 in United States Court of Appeals as a Function of 1997 IDEA Amendments**

	Vote		
IDEA 1997	Liberal	Conservative	Total
Pre-1997 Amendments	14 (53.8%)	12 (46.2%)	26 (100.0%)
Post-1997 Amendments	160 (44.3%)	201 (55.7%)	361 (100.0%)
Total	174 (45.0%)	213(55.0%)	387(100.0%)

*Votes favoring tuition reimbursement or ordering a remand were coded as liberal

Table 10 includes frequency distribution and related percentage for the 78 "liberal" and 162 "conservative" votes in autism tuition reimbursement decisions as a function of pre- and post-1997 IDEA amendments. Remands were excluded in this analysis.

During the pre-1997 amendments period, 8 (47.1%) of the 17 votes cast were in a pro-parent, liberal direction, whereas during post-1997 timeframe 70 (89.7%) of the votes were liberal, pro-parent. This resulted in a 15.7% decrease in liberal, pro-parent voting compared to the earlier period. Based on this calculation in post-1997 filings, parent as plaintiff in autism reimbursement cases heard post-1997 resulted in fewer wins for parents' efforts in recouping autism educational

expenses. The decrease in percentage of liberal vote suggests that the implementation of IDEA 1997 Amendments impacted appellate judges' decisions. In looking at decisions that excluded remands, the decrease in percentage of liberal vote suggests that the implementation of IDEA 1997 Amendments impacted appellate judges' decisions. Further analysis via logistic regression may indicate any level of significance.

Table 10

*Frequency and Percentage of Liberal and Conservative Votes Cast in IDEA Tuition Reimbursement Decisions involving Students with Autism between 1983 and 2016 in United States Court of Appeals as a Function of 1997 IDEA Amendments**

	Voting		
IDEA 1997	Liberal	Conservative	Total
Pre-1997 Amendments	8 (47.1%)	9 (52.9%)	17 (100.0%)
Post-1997 Amendments	70 (31.4%)	153 (68.6%)	223 (100.0%)
Total	78 (32.5%)	162 (67.5%)	240 (100.0%)

*Votes favoring tuition reimbursement were coded as liberal and remands are excluded from this analysis

Inferential Analyses

Inferential analyses via logistic regression have been employed in Tables 7 through Table 10 to determine the effects of ideology and the 1997 amendments on judges' voting in the cases of interest. The results contained in Table 11 and Table 12 used party of the appointing president and pre- and post-1997 IDEA Amendments as the independent predictors of judges' voting in IDEA tuition reimbursement cases involving students with autism.

In Table 11, pro-parent, pro-reimbursement votes (as well as remanded votes) are counted as "liberal," while pro-district votes against parental tuition reimbursement claims are considered "conservative." This results in 387 total votes included in the analysis.

The analysis indicates that the full model was significant in predicting judges' voting (omnibus chi-square = 8.853, df = 2, p = .012). This model accounts for between 2.3% and 3.0% of the variance in judge votes, with 50.6% of the liberal, pro-parent votes accurately predicts and 63.8% of the conservative, pro-district votes accurately predicted. The overall accuracy of prediction in the model is 57.9%.

Table 11 displays the coefficients, the Wald statistic, associated degrees of freedom, and probability values (odds ratio and Exp(B)) for the predictor variable. Discriminant analysis demonstrated that ideology as expressed as party of the appointing president reliably predicts the votes of appellate judges in autism tuition reimbursement cases. The coefficients reveal that the ideology of judges—as indicated by the party of the appointing president—are significant at the 0.01 alpha level (p = .005) with a positive relationship existing between variables as coded. The odds of a Democratic appointed judge voting liberally are 1.797 or 79% greater (95% CI 1.194 and 2.703) than Republican appointed judges in the cases reviewed. However, no significant differences in the odds of a pro-parent, liberal vote is revealed between voting during the pre- and post-June 4, 1997 timeframes (p > .05).

Table 12 contains the logit analysis performed on the 240 votes when remands are excluded. The results indicate that the model is significant at the 0.1 alpha level in predicting voting in IDEA tuition reimbursement cases (omnibus chi-square = 5.814, df = 2, p = .055). The result is that 5.1% of the liberal, pro-parent votes are accurately predicted while 98.1% of the conservative, pro-district votes are accurately predicted. The overall accuracy of prediction in the model is 67.9%.

Table 12 shows the coefficients, the Wald statistic, associated degrees of freedom, and probability values (odds ratio and Exp(B)) for the predictor variables. Discriminant analysis

demonstrated that ideology as expressed as party of the appointing president reliably predicts the votes of appellate judges in autism tuition reimbursement cases. The coefficients reveal that the ideology of judges—as indicated by the party of the appointing president—were significant at the 0.05 alpha level (p = .043). The odds of a pro-parent, liberal vote are 1.762 or 76% times greater (95% CI 1.019 and 3.046) when the vote was cast by a Democratic appointee compared to votes cast by a Republican appointee. The data revealed, however, that votes cast pre- and post-1997 amendments did not differ significantly from one another in the pro-parent, liberal direction of the voting (p > .05).

Table 11

Logit Analysis on the Odds of a Liberal Vote in IDEA Tuition Reimbursement Decisions with Remand Cases Included in the United States Court of Appeals Decided between 1983 and 2016 for Students with Autism, by Party of Appointing President (P.A.P.) and Date of Decision by Pre- and Post-1997 IDEA Amendments

Independent Variables	B	S.E.	Wald	df	P	Exp (B)
Ideology Party of the appointing president	0.586	0.208	7.903	1	0.005	1.797
Post-1997 IDEA Amendment	-0.344	0.41	0.695	1	0.404	0.709
Constant	-0.136	0.41	0.109	1	0.741	0.873

Table 12

Logit Analysis on the Odds of a Liberal Vote in IDEA Tuition Reimbursement Decisions with Remand Cases Excluded in the United States Court of Appeals Decided between 1983 and 2016 for Students with Autism, by Party of Appointing President (P.A.P.) and Date of Decision as Pre- or Post-1997 IDEA Amendments

Independent Variables	B	S.E.	Wald	df	P	Exp (B)
Ideology Party of the Appointing President	0.566	0.279	4.109	1	0.043	1.762
Post-1997 IDEA Amendment	-0.698	0.51	1.856	1	0.173	0.498
Constant	-0.353	0.50	0.489	1	0.484	0.703

The results contained in Table 9 and Table 10 used DW-NOMINATE Measure scores and pre- and post-1997 IDEA Amendments as the independent predictors of judges' voting in IDEA autism tuition reimbursement cases.

In Table 13 pro-parent, pro-reimbursement votes (remands included) were counted as "liberal," while pro-district votes against parental tuition reimbursement claims were considered "conservative." This resulted in 387 total votes. The analysis indicated that the full model was significant in predicting judges' voting (omnibus chi-square = 6.801, df = 2, p = .033 ($p < 0.5$). The model accounted for between 1.7% and 2.3% of the variance in judge vote with 46.6% of the liberal vote predicted and 69.0% of the conservative vote predicted. Overall 58.9% of the predictions were accurate.

Table 13 gives coefficients and the Wald Statistic and associated degrees of freedom and probability values (odds ratio and Exp(B)) for each of the predictor variables. This shows that ideology of judges—as indicated by the DW-NOMINATE Measure scores reliably predicted judges' voting. This predictor was significant at the .05 alpha level ($p = 0.016$). The results reveal that for each unit increase in DW-NOMINATE Measure score (for example, from -1 to 0 or from 0 to 1) the odds of a liberal, pro-parent vote decreased by a factor of 0.549 (95% CI

0.337 and .893). However, comparisons of the voting during the pre- and post-1997 amendments timeframes did not reveal significant differences ($p = 0.417$).

Table 14 contains the logit analysis performed on the 240 votes when remands were excluded. The results indicate that the model, was significant at the 0.05 alpha level (omnibus chi-square = 7.060, df = 2, $p = .029$). Based on the Cox and Snell R Square and Nagelkerke R Square tests, this model accounted for between 2.9% and 4.0% of the variance in judge votes. The model successfully predicted 3.8% of the liberal, pro-parent votes and 98.1% of the conservative, pro-district votes. The overall accuracy of the model is 67.5%.

Table 14 shows the coefficients, the Wald statistic, associated degrees of freedom, and probability values (odds ratio and Exp(B)) for the predictor variables. Ideology is indicated to reliably predict the votes of appellate judges in autism tuition cases. The coefficients reveal that the ideology of judges—as indicated by the DW-NOMINATE Measure scores were significant at the 0.05 alpha level ($p = 0.022$). The results indicated that for each unit increase in judges DW-NOMINATE Measure scores (for example, from -1 to 0 or 0 to 1) the odds of a liberal, pro-parent vote decreased by a factor of 0.453 (95% CI 0.230 and 0.894). The results with remands excluded revealed that no significant differences in voting occurred when the pre-1997 amendments timeframe was compared to the later period ($p > 0.05$).

Table 13

Logit Analysis on the Odds of a Liberal, Pro-Parent Vote in IDEA Tuition Reimbursement Decisions with Remand Cases Included in the United States Court of Appeals Decisions Between 1983 and 2016 for Students with Autism, by DW-NOMINATE Measure Score and Date of Decision as Before or After 1997 Amendments

Independent Variables	B	(S.E.)	Wald	df	*P*	Exp (B)
Ideology DW-NOMINATE Measure Score	-0.600	0.248	5.844	1	0.016	0.549
Post-1997 IDEA Amendment	-0.322	0.410	0.658	1	0.417	0.717
Constant	0.161	0.395	0.166	1	0.683	1.175

Table 14

Logit Analysis on the Odds of a Liberal, Pro-Parent Vote in IDEA Tuition Reimbursement Decisions with Remand Cases Excluded in the United States Court of Appeals Decisions Between 1983 and 2016 for Students with Autism, by DW-NOMINATE Measure Score and Date of Decision as Before or After 1997 Amendments

Independent Variables	B	(S.E.)	Wald	df	*P*	Exp (B)
Ideology DW-NOMINATE Measure Score	-0.791	0.447	5.216	1	0.022	0.453
Post-1997 IDEA Amendment	-0.653	0.510	1.639	1	0.200	0.520
Constant	-0.093	0.489	0.036	1	0.849	0.911

Chapter 4 Summary

This research began as an exploration of the predictive nature of judicial ideology to explain judicial vote, and specifically to determine if party of the appointing president offered equal predictability as DW-NOMINATE Measure score. Fischmann and Law (2009) have noted that "little has been written about how researchers should go about choosing among [research] methods" (p. 4). They explain that "competing considerations of accuracy, convenience, and ease of interpretation make it difficult to know what measurement approach is most appropriate" (p. 4). In response, it was with deliberation that I used both party of the appointing president and DW-NOMINATE Measure scores so that comparison could be made as to the predictability of ideology as determinant of judge vote.

Researchers have criticized the use of party affiliation as overly simplistic to explain the behaviors of judges. Judge Harry Edwards of the D.C. Circuit, has also painted our nations' judges as "knee-jerk" ideologists who decide cases without due consideration of the law (Edwards, 1998). My analyses, however, that when comparing the proxies of party of the appointing president and DW-NOMINATE Measure scores, there appears to be a high degree of consistency between the results of each of these measures to predict voting behaviors.

Accepting that judicial voting behaviors are influenced by many factors, this study investigated the projected effects of political ideology, and the legal precedence of IDEA 1997 Amendments, on U.S. Appellate Court judges' decisions in K – 12 autism tuition reimbursement cases between 1983 and 2016. Descriptive statistics with frequency count and percentage for judge vote (with and without remands included) were presented for judge-level factors. Binary logistic regression provided inferential statistical results.

CHAPTER 5: SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

Chapter 5 Introduction

The goal of this study was to discuss the nature of judicial ideology—through two proxies for comparison of party of the appointing president and DW-NOMINATE Measure score—to predict the voting habits of U.S. appellate judges, inclusive and exclusive of remanded cases that address tuition reimbursement claims on behalf of autistic students and their parents. Reimbursements requested on behalf of students with autism were for a broad category of educational expenses incurred outside the public K-12 setting. The primary expense identified in assembling of the database of this study was reimbursement for private school tuition due to unilateral placement of the student at a facility or school by a parent. The study covers the time between January 1983 and August 2016, delineating between votes cast pre- and post-IDEA 1997 Amendments. This chapter analyzes and discusses both the descriptive and inferential statistical results presented within Chapter 4 of this work.

Descriptive Results

Among 610 votes cast in K-12 autism tuition reimbursement disputes heard in U.S. Appeals Court between January 1983 and August 2016, a total of 174 votes were cast by Democratic appointees and 213 were cast by Republican appointees. Considering that Democratic appointees voted liberally 52.3% of the time, while Republicans voted liberally 33.8% of the time, the descriptive data suggested that judges' ideologies influenced their liberal vote at a higher level of frequency than their Republican counterparts.

Of interest in this study is the examination of the periods pre- and post-implementation of the1997 IDEA amendments. Descriptive analysis showed that of the 387 votes cast during the entire period under study, 174 or 45% were case in a liberal direction while 213 or 55% were

cast in a conservative direction. In the time frame after the implementation of the amendments, of the 387 votes cast, 160 or 44.3% were cast in a liberal direction while 201 or 55.7% were cast in a conservative direction (see Table 5). The descriptive data examining all votes within the dataset, suggest that votes cast prior to June 4, 1997 were overall more conservative (pre- and post-implementation), with a decrease in liberal vote and an increase in conservative vote occurring post-implementation. Use of logistic regression analyses provided a clearer understanding of the subtle nuances among judges' voting ideology (liberal to conservative) occurring within the pre- and post-1997 IDEA Amendment time frames.

Inferential Analyses Results

Zirkel (2013) reminds that litigation by parents under the Individuals with Disabilities Education Act (IDEA) has largely challenged districts' lack of provision of a free appropriate public education (FAPE) for students served under an individualized education plan (IEP) with the two principal remedies for denials of FAPE being tuition reimbursement and compensatory education. In appellate cases seeking tuition reimbursement for students with autism, it is valuable to look at judge voting to determine if outcomes can be predicted.

Considering research question 1. Does U.S. Court of Appeals judges' political ideology (as measured by party of the appointing president or DW-NOMINATE Measure scores) influence their voting in whether to award tuition reimbursement under the IDEA in cases involving students with autism?

In search of an answer to the first research question, this researcher utilized the inferential analyses results to determine the extent to which U.S. Court of Appeals judges' political ideology (as measured by party of the appointing president and DW-NOMINATE Measure

scores) influences voting to award tuition reimbursement under the IDEA. A look at judicial voting patterns with remanded decisions included is presented.

Inferential Analyses of Judge's Ideology as Measured by Party of the Appointing President

The analysis of the appellate judge vote as predicted by the party of the appointing president explores the extent to which a parent may receive a pro-tuition reimbursement decision when FAPE has been denied. In the logistic regression analysis using party of the appointing president as the measure of judge ideology conducting analysis on the data set (all votes included), the principal findings are reported as follows. Democratic appointees were significantly more likely to vote in a liberal direction than were Republican appointees with the differences of the odds attaining significance at a 0.05 alpha level ($p < .005$). The odds of a Democratic appointed judge voting in a liberal direction were 1.797 times greater than the odds of a Republican appointed judge voting in a liberal direction.

This finding is consistent with Lammon (2009) in his reporting that within judicial politics, "judicial behavior boils down to a conscious and purposeful choice of an outcome that relates to the position of the judge's political party" (p. 239). According to Lammon (2009), this definition of ideology though simplistic in nature, attributes "the influence of traditional notions of individual rationality and autonomy… [and] portray[s] judges as rational actors…consciously impos[ing] their policy preferences through their decisions" (p. 240). It should be noted that to reject judicial ideology as represented in this simple form is to reject empirical research utilizing party of the appointing president and researchers' findings that validate this proxy as a valid measure of judicial ideology. A further look at judicial voting patterns with remanded decisions excluded is also presented.

The analysis of the judge vote with remands excluded (and as predicted by the party of the appointing president) explores the extent to which a parent may receive a pro-tuition reimbursement decision when an autism case with denial of FAPE has been appealed. In the logistic regression analysis of the data set with remands excluded, using party of the appointing president as the measure of judge ideology, the principal findings are reported as follows. Democratic appointees were significantly more likely to vote in a liberal direction than were Republican appointees with the differences of the odds attaining significance at a 0.05 alpha level ($p < .043$). The odds of a Democratic appointed judge voting in a liberal direction were 1.762 times greater than the odds of a Republican appointed judge voting in a liberal direction.

Inferential Analyses of Judge's Ideology as Measured by DW-NOMINATE Measure Score

Judge's Ideology as Measured by DW-NOMINATE Measure Score. In the logistic regression analysis of the full database using DW-NOMINATE Measure score as the proxy for judge ideology, the principal findings are reported as follows.

The analysis of the appellate judge vote as predicted by the DW-NOMINATE Measure scores explores the extent to which a parent may receive a pro-tuition reimbursement decision when FAPE has been denied. Democratic appointees were significantly more likely to vote in a liberal direction than were Republican appointees (see Table 9) with the differences of the odds attaining significance at a 0.05 alpha level ($p < .016$). The results revealed that for each unit increase in DW-NOMINATE Measure scores (for example, from -1 to 0 or from 0 to 1) the odds of votes cast after 1997 were 1.821 times less likely to be liberal in direction than those cast before 1997. However, comparisons of the voting during the pre- and post-1997 amendments timeframes did not reveal significant differences ($p = 0.417$).

In the logistic regression analysis (with the data set excluding remands) using DW-NOMINATE Measure score as the proxy for judge ideology, the principal findings are reported as follows. Democratic appointees were significantly more likely to vote in a liberal direction than were Republican appointees (see Table 10) with the differences of the odds attaining significance at a 0.022 alpha level ($p < .0.05$). The results revealed that for each unit increase in DW-NOMINATE Measure scores (for example, from -1 to 0 or from 0 to 1) the odds of votes cast in a liberal direction were 2.21 times less likely to be liberal in direction than those cast before 1997. However, comparisons of the voting during the pre- and post-1997 amendments timeframes did not reveal significant differences ($p = 0.200$).

Considering research question 2. Are there differences in the power of party of the appointing president (Republican or Democrat) and DW-NOMINATE Measure score (political conservatism or liberalism) in predicting whether court of appeals judges' award tuition reimbursement in IDEA cases involving students with autism? This researcher sought to determine if there are differences in the predictive nature of the two proxies for ideology—party of the appointing president (Republican or Democrat) (see Table 5 and Table 6) and DW-NOMINATE Measure score (politically conservative or liberal) (see Table 7 and Table 8)—for projecting whether court of appeals judges' award tuition reimbursement for parents of students with autism seeking remedy under IDEA provisions.

The results of the analyses performed on the two data sets were very similar with equal significance for the dependent variables whether including or excluding remanded decisions. Pearson Chi-square results revealed an inverse relationship with the log odds being negative and the odds less than 1. For example, as seen in Table 7 through Table 10, there is a positive relationship between the predictor variables and the dependent variables. For example, as the

vote cast became more liberal, and decreased in DW-NOMINATE Measure score, the greater the likelihood of a pro-parent vote awarding tuition reimbursement. Overall liberal, pro-parent, pro-tuition reimbursement decisions decreased in the period after June 4, 1997 as IDEA Amendments were executed. Parents choosing to unilaterally place their children in private schools and pay for educational services (in hopes of recovering their out-of-pocket expenses), did so at their own risk (Martin, 2011).

A chi-square test of independence was calculated across the four models comparing the ideology of judges and voting behaviors. In using ideology as represented by the proxy of party of the appointing president, with all votes included the Pearson Chi-square test revealed a strong association between the party of the judge and their vote ($x^2(1) = 8.147$, $p = .004$). Democratic appointed judges were 53.3% more likely to vote in a liberal direction than Republican appointed judges at 38.7%.

In using ideology as represented by the proxy of party of the appointing president, excluding remands, the Pearson Chi-square test revealed a strong association between the party of the judge and their vote ($x^2(1) = 4.013$, $p = .045$). Democratic appointed judges were 39.3% more likely to vote in a liberal direction than Republican appointed judges at 27.1%.

In using ideology as represented by DW-NOMINATE Measure score, with all votes included, the Pearson Chi-square test revealed a strong association between how liberal or conservative a judge is and their vote ($x^2(76) = 90.971$, $p = .116$). Judges with DW-NOMINATE Measure scores falling in the liberal range (0 to -1) account for 43.7% as voting pro-parent, pro-tuition reimbursement as opposed to judges with DW-NOMINATE Measure scores falling in the conservative range (0 to +1) voting conservative, pro-district which account for 56.3% of the vote. Of the 387 votes cast, 169 were liberal, pro-parent. In looking at the liberal, pro-parent

vote, of the 174 Democrat votes, 90 or 51.7% of their vote was in the liberal direction while of the 213 Republican votes cast, 79 or 37.1% of their vote was cast in the liberal direction.

In using ideology as represented by DW-NOMINATE Measure score, excluding remands, the Pearson Chi-square test revealed a strong association between how liberal or conservative a judge is and their vote ($x^2(98) = 128.293$, $p = .022$). Judges with DW-NOMINATE Measure scores falling in the liberal range (0 to -1) with 53.2% voting pro-parent, pro-tuition reimbursement as opposed to judges with DW-NOMINATE Measure scores falling in the conservative range (0 to +1) accounting for 33.8% of the vote.

When comparing the Pearson Chi-square test results across the four models, it can be noted that the precise nature of the DW-NOMINATE Measure scores provided for an increased accuracy in calculating the statistical significance of ideology in predicting judge vote. Significance with use of all votes increased from $p = .045$ to $p = .116$ when comparing use of party of the appointing president versus DW-NOMINATE Measure scores; while use of the data set excluding the remands increased from $p = .004$ to $p = .022$ respectively, when comparing use of party of the appointing president versus DW-NOMINATE Measure scores.

Overall, liberal judges with DW-NOMINATE Measure scores less than 0 (0 to -1) were more inclined to vote pro-parent in accordance to their liberal ideology. These analyses further show that parents were less likely to prevail as plaintiffs and receive a decision awarding them tuition reimbursement after IDEA 1997 amendments and legislation further defined “adequate” education for children served in public school settings.

Chapter 5 Summary

Using a unique data set of information gleaned from court records between January 1983 and August 2016 for autism tuition reimbursement cases contained within the Westlaw data, this researcher addressed a gap in empirical knowledge: Does the ideology of appellate judges as indicated by use of party of appointing President (Republican or Democrat) and DW-NOMINATE Measure scores (politically conservative or liberal) predict voting habits in pre- and post-IDEA 1997 Amendments? In other words, in tuition reimbursement cases appealed on behalf of students with autism, did the plaintiff/parent—seeking monetary compensation for educational expenses to meet the unique needs of the student—have a greater likelihood of success before or after changes to IDEA in 1997?

Key legislation and precedential cases heard in the U.S. Courts on behalf of students with disabilities, framed the investigation to identify key changes that could affect a parent as plaintiff's receipt of a favorable decision for tuition reimbursement. Due to recurring citation within judicial opinion and court documents reflective of litigation brought on behalf of individuals with disabilities in the K-12 setting between 1983 and 2016, three key cases were selected early in the formation of the study for possible effects on appellate votes in favor of parents of students with autism as plaintiffs: Rowley (1982), Burlington (1985), and Florence (1993). Having utilized these key dates as variables, no significance was found to indicate increases in favorable decisions. This warrants discussion given the public's perception of anticipated change as a result of legislation.

Rowley (1982) contributed to our public-school system's understanding and application of the legal definition of educational benefit. The "Rowley Test of Educational Benefit" assured that districts constructed and implemented a reasonably calculated Individual Education Plan

(IEP) that provided "educational benefit." This sets the foundation on which all other provisions are considered "additive" and beyond the provision of an "adequate education" with provision of FAPE. Because of legal precedence set with Rowley (1982) provisions of services, support personnel, and materials became closely scrutinized by "cash-strapped" school district's administrators; this was due to the narrowing definition of what the law required districts to provide for students with disabilities. It can be surmised that adjustments to children's IEPs occurred. Because the legal statutes clearly indicated that a district did not have to "maximize" a student's services and provisions to be compliant, students could see a reduction in what educational materials were supplied, the frequency and length of services provided, and the implementation of "new" or "unproven" methods for working with students with autism. It has often been stated that the "Cadillac" would no longer be provided when the "Vega" would do—where application of Rowley (1982) was concerned.

Zirkel (2013) reminds that given the perceived Congressional intent, the Rowley decision seems "to suggest strictness with regard to procedural compliance and a relatively relaxed substantive standard" (p. 217). This emphasizes district violation of procedural requirements that result in perceived loss of education benefit under the IEP and procedural violation as a result of poor implementation of the IEP.

With Rowley (1982) the burden of proof was shifted to parents for ability to prove that services and related educational materials were necessary and further, that the special schools, programs, or therapies met the standard of providing "educational benefit" to the child. Parents of students with autism faced a unique dilemma in that, even as more new programs and procedures gained acceptance as optimal services for students with Autism, i.e., Applied Behavior Analysis (ABA), Lovaas Methods, and Social Skills Training, districts did not include

these "Cadillac" services as necessary to meet FAPE because of a new definition of legal responsibility. Many of the cases that were researched revealed that school districts and district courts alike failed to reimburse parents for such behavioral supports. Additionally, students with more intense behaviors requiring the greatest support were often denied reimbursement for residential treatment and private school educational programs specifically tailored to meet the unique needs of the profoundly autistic and intellectually disabled. Districts considered behavioral supports outside the parameters of "educational need" as defined by FAPE. Seligman (2005) indicates that Rowley (1982) put parents at a disadvantage because it "set up terms of deference to local school district's expertise" which discounts parental knowledge of student need.

Burlington (1985) codified what the federal government identified as being a "reasonably calculated IEP." In review of the data collected in the appellate cases reviewed for this study, parents seeking private school educations with specialized treatments and programs for their autistic child consistently were denied tuition reimbursement unless the student's IEP was not found to be "appropriate." The Burlington (1985) case further narrowed the parameters for district's reimbursement for services, appellate cases filed, and the three-panel evidence of judge's voting along partisan lines, with pro-district/conservative vote exceeding pro-parent/liberal votes.

Florence (1993) offered parents hope for prevailing in tuition reimbursement cases when the court decided that a private school does not require approval by the state or otherwise meet state standards to qualify for tuition reimbursement. Data do not reveal, however, that parents received tuition reimbursement for private school tuition at a greater rate in the post-Florence precedence. Courts henceforth utilized the "Burlington-Carter" test when evaluating the merits of

tuition reimbursement cases: (1) Is the student's IEP reasonably calculated to assure FAPE with student receiving "educational benefit" from the services outlined in the plan? And (2) under IDEA's definition for "appropriateness", is the private school placement found by a hearing officer or court to be "appropriate?"

Ultimately Rowley (1982), Burlington (1985), and Florence (1993) as precedential influencers on judicial appellate votes for this student population were not included in the final stages of reporting within the analyses of this data set because of lack of significance. Analyses of the IDEA 1997 Amendments, however, did reveal possible indications of affecting judges' votes in post-1997 tuition reimbursement cases as appealed on behalf of students with autism.

Considering research question 3. What influences do legal developments in IDEA 1997 Amendments exert on Court of Appeals judges' voting in IDEA tuition reimbursement cases involving students with autism?

The 1997 Individuals with Disabilities Education Act (IDEA), as well as the 2004 updates, were separately analyzed for possible effects based on their potential influence on appellate judge liberal/pro-parent or conservative/pro-district vote. Ultimately, the data set was not delineated for pre- and post-2004 analysis. It was determined that examination of the full data collection between 1997 and 2016 showed that votes cast pre-and post-1997 IDEA Amendment revealed significance.

Parents of children with autism likely were encouraged by the enactment of legislation that was designed to assure quality educational services for all students with disabilities. The IDEIA 2004 update advanced the court's ability to specifically address complaints of students with autism, finally recognized as one of the thirteen federal categories of disabilities. Shifts in references within the court records show that labeling of students with autism shifted from "other

health impaired" or "disabled child" to an "autistic son/daughter." It is easy to see how recognition of autism as a federally recognized disabling condition under IDEA—with federal monies now allocated to school districts for educating students with autism—would lead parents to hope that reimbursement by school districts for specialized services, goods, and programs would increase. Even with scientists, researchers, and practitioners continuing to develop techniques and products yielding noticeable and specific benefits as early intervention for students with autism, however, parents' requests for "Cadillac" services were still met with significant out-of-pocket expenses.

To summarize, the data analyzed within this study evaluated the strength of the party of the appointing president—a binary independent variable, and DW-NOMINATE Measure scores—a continuous independent variable, to predict the liberal, pro-parent judge votes in K-12 autism tuition reimbursement disputes in the time frame pre- and post-1997 IDEA Amendments. It was anticipated that the more powerful predictor would be the use of the DW-NOMINATE Measure score rather than the party of the appointing president variable. This prediction was confirmed by observed outcomes. Use of both descriptive tables and regression analyses allowed for consideration of ideology and legal precedence as factors impacting judge vote. This researcher's study is additive to the current knowledge regarding (1) the occurrence of U.S. Court of Appeals judges' awarding of tuition reimbursements to plaintiffs filing on behalf of students with Autism pre- and post-IDEA 1997 updates and completed before August, 2016; (2) the reliability of using two proxies—party of the appointing president and DW-NOMINATE measure score as indicators of judicial ideology for pro-parent/liberal or pro-school district/conservative votes; and (3) the influence of IDEA 1997 updates on appellate judges' liberal and conservative votes between the years of 1997 and 2016 in K-12 Tuition

Reimbursement cases using logistic regression as the primary statistical tool. Results were similar whether the autism remands were included or excluded, indicating that this variable is of little consequence when attempting to address whether judicial ideology affects the ruling in tuition reimbursement cases of this type. A parent's brief success through continuation granted in remand to the district court for further deliberation was not explored for plaintiff-as-parent prevailing and recoupment of tuition reimbursement.

Limitations of Study

A limitation of this study is the possible oversimplification of examining ideological influences of appellate judges' in autism reimbursement cases by using the party of the appointing president as a determinant of a judge's ideology. Certainly, a judge's ideology may change over time; therefore, a researcher's establishing a judge as either a strict party Democratic/"liberal" or Republican/"conservative" over the entirety of their time on the bench may not account for ideological drift. It should be noted that the studies focusing on judicial influences within appellate court do find that Democratic judges tend to be more liberal than Republican judges (Ashenfelter, Eisenberg, & Schwab, 1995). Also, the judge may have been appointed by a president whose ideology differed from their own. It is possible that in the constraints to fill the bench, full disclosure of information to give a long-term prediction of the ideology was either absent or misleading, resulting in the appointment of a judge with a differing ideology from that of the appointing President. Another consideration is that the appointment may have occurred primarily because of a politically-laden decision unique to the time and the composition of the pool of potential candidates.

Another limitation of the study is the number of U.S. Appellate Court autism reimbursement cases between 1983 and 2016. Early search parameters yielded 131 possible decisions for 393 potential judge's votes to be analyzed for significance. Ultimately, 127 cases for 387 judge votes met criteria for inclusion in this study. For clearer indication of the extent to which judicial ideology affects outcomes of autism reimbursement cases may be generalized, a greater number of court decisions would have been optimal.

An additional final limitation of this study is that not all legal decisions filed on behalf of students with disabilities were considered accounting for possible cumulative influence on judge

vote. The study was necessarily limited to inclusion of cases filed on behalf of students with autism which provided for a smaller pool of potential cases.

A final limitation is that, within Supreme Court cases, identification and selection of cases possessing possible significance for influence on judge vote was challenging. The three cases selected for initial review for possible effects--namely Rowley (1982), Burlington (1985), and Florence (1993)—were selected based on recurring citations within judicial opinion and court documents stemming from U.S. public school litigation between 1983 and 2016. Ultimately, however, these were not included in this stage of reporting on analyses of this data set. Finally, the 1997 Individuals with Disabilities Education Act (IDEA) as well as the 2004 updates were each analyzed for effects of potential influence on judge vote for this study. Unlike analyses for votes cast pre-and post-1997 IDEA Amendment, analyses utilizing the time frame for pre- and post-2004 IDEA amendments bore no indication of significance for this study and thus were not pursued for this reporting.

Future Research Directions

This analysis was an initial exploration of tuition reimbursement cases filed in the U.S. Court of Appeals on behalf of students with autism and was limited to published court cases accessible through West's Westlaw database. Because the first appellate case for tuition reimbursement of students with autism identified was in 1983, no earlier years of review would be applicable. The data set could be expanded annually to add additional cases expected to be filed as the numbers of autistic children served in public schools also increases. Extending the analysis beyond August 2016 to include additional published autism tuition reimbursement cases filed at the appellate level will increase the pool of cases for review, therefore offering expanded comparative analyses over time.

Recommendations

In review of the analyses evaluating the success of parents of autistic students to recover tuition reimbursement costs, it is recommended that efforts be made by both parents and public schools to limit the number of formal complaints filed. Formal litigations are time-intensive, as well as emotionally and financially draining. Parents should work with schools to increase communication with campus providers and avoid unilateral withdrawals resulting in private school placements. It is with great risk that parents invest financially to provide outside services for their child, and the litigation of reimbursement by the school district when an appropriate IEP has been offered and FAPE met in a timely manner frequently is without foundation. Analyses show that prevailing as plaintiff for reimbursement has steadily decreased in the post-1997 IDEA Amendment era.

With increasing numbers of students being identified with autism, it is likely that increased resource allocation at the district level is to be expected for schools to provide a FAPE for children with autism. Zirkel (2012) warns that there has been a disproportionate amount of litigation filed on behalf of autistic students between the years of 1993 and 2006 with most of litigation related to FAPE and LRE. Accordingly, school districts should expect that, with increased numbers of students with autism entering public education each year (Zirkel & Johnson, 2011), an increase in proactive measures to meet student needs at the service delivery level is warranted. To that end, for policy development and best practice, I recommend the following:

School districts should critically evaluate their district and campus plans for meeting the specialized needs of autistic children. To proactively address parent concern and mitigate possible litigation, the following questions may be helpful:

1. Are there facilities available to offer a safe and nurturing learning environment with security in place to satisfy child need and parental concern?
2. Are there highly qualified professionals, trained in research-based methodologies to provide programmatic options for students with autism?
3. Are there strategic plans for designing IEPs to satisfy FAPE requirements?
4. Have supplemental service providers been identified and engaged to meet IEP service requirements?
5. Have transportation arrangements (bus, assistant/monitor and route) been secured to assure safe passage of the autistic student?
6. Are there procedures and staff training in place to reduce the number of parent concerns from escalating to levels requiring a due process hearing or litigation?
7. Has an immediate review of the child's IEP been provided upon advisement of a unilateral parent enrollment in a private placement?
8. Has an objective consultant assisted in drafting / reviewing / implementing the child's current IEP?
9. Have the parent's complaints been addressed immediately, specifically, and with intent for resolution?

Parents should educate themselves to understand their rights and responsibilities as a parent of a student with autism within public schools. Most importantly, parents should take a critical look at the level of cooperation and communication that has occurred between them and the school.

1. Has the school formally notified you of your rights under IDEA?
2. Has the student been formally evaluated in all areas of need?
3. Has a team of qualified professionals cooperatively worked with you to develop an IEP that satisfies provision of a FAPE?
4. Has open communication occurred to explore any concerns related to the IEP?
5. Has the plan been implemented in a timely fashion?

School districts must be prepared to meet with parents of students with autism to collaboratively address educational concerns and avoid complaints resulting in costly due process hearings. A team of competent, knowledgeable individuals who are familiar with the student's needs should work collaboratively to create a high quality individual education plan (Goren, 2012). Providing trained IEP facilitators to assist parents and teachers in the drafting of autistic students' intervention plans could increase the quality of the documents produced and increase parent satisfaction with expected service delivery. In proactively providing district-level autism specialists to collaborate with teachers of autistic students and students' IEP committees, parent confidence for IEP implementation at the campus level would likely increase. In the event an issue with the student's IEP emerges, a district-level specialist in autism should enter the conversation early in the process to mediate for successful resolution of the parent's concerns.

States should increase allocations for the hiring of highly qualified teachers with specialized training for working with students with autism. Finally, resources should be

increased with the purchase of a variety of research-based materials for teacher use in order that they may provide students with autism opportunity of an education that conveys meaningful benefit.

Conclusion

The final point offered by the researcher is that while the effects of ideology on judges' votes may not be fully understood, it is important to evaluate how liberalism and conservatism may affect outcomes in appellate cases heard on behalf of students with autism. The court records clearly show that there has been a decline in pro-parent, pro-tuition reimbursement decisions in appellate court after IDEA's June 4, 1997 amendments were enacted. It is advisable that school districts work collaboratively with parents to reduce the due process hearings especially considering the increased incidence of children identified with autism being served in public schools.

The refinement of language within the policy guiding K-12 public school service delivery appears to shape the individual judge decisions cast ultimately decreasing pro-parent, pro-tuition reimbursement after the adoption of the 1997 Amendments of IDEA. Refinement of educational policy through successive amendments to IDEA is predicted to further erode pro-reimbursement decisions for educational expenses paid by parents. Given this voting trend, parents should expect tuition reimbursement awards to be given only when the Rowley standard clearly reveals that FAPE has not been met by the school district and an IEP is not proven to be adequate or implemented in a timely fashion. Further, if FAPE has not been met by the public-school district, an informed parent choice of an approved, private facility should be financed if it clearly provides research-based interventions in order to provide for an adequate education for the child. Training and preparing both pre-service and active teachers in research-based programs uniquely designed for educating students with autism is critical. Assuring that all children receive a quality education requires that the programming to meet the needs of children who are on the spectrum are provided early and are designed to target behavioral and communication needs

through use of research-based methodology and products. In this way, teachers can better address the needs of students with autism.

Since the internal shifting of funds to award tuition reimbursement can impose financial hardship on schools already struggling to address children's unique educational needs across the broad range of disabling conditions, offering federal funding options to school districts to supplement special programming for autistic students is advisable. This may increase faith and trust in local schools to meet the unique learning needs of children with autism.

Further, equal pace must be maintained between funding and policy development at state and federal levels to assure equity in service delivery across all public schools. Policy and provisions must be designed specifically to include enhanced programming tailored for meeting the needs of students with autism. Increasing awareness to the unique communication and training needs of individuals with autism will better inform those writing and applying educational policy. With the increased numbers of children within the K-12 age range who are "on the spectrum," it is important to increase public awareness to better understand the effects of the judges' ideology on parents' recoupment of expenses.

It is also important to explore how best to increase communication with parents seeking to unilaterally enroll their autistic child in a private school or privately funded disability-specific remedial services and programs. Public educators must do a better job in communicating with parents for the provision of services that adequately meet programming needs. Increasing parent satisfaction and decreasing instances of unilateral enrollment in private school is a reasonable course of action; equipping public schools to critically evaluate their preparedness in meeting the needs of students with autism is crucial.

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