

# Using Science to Influence the Supreme Court on the Right to Refuse Treatment: *Amicus Curiae* Briefs in *Washington v. Harper*

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The Supreme Court's use of empirical behavioral science data has grown dramatically in the 40 years since *Brown v. Board of Education*. Most of these data are submitted in *amicus curiae* (friend of the court) briefs submitted by parties with an interest in the outcome of the significant mental health law cases coming before the court. The increasing use of such briefs raises important questions. Is there evidence that the court is actually influenced by such briefs? Can scientific/professional organizations present scientific data objectively in a clearly adversarial document? A review of the nine *amicus* briefs filed in *Washington v. Harper*, a right to refuse treatment case, and a comparison of the Court's opinion with that of the dissent demonstrate that both the majority and the dissent refer to arguments contained in the briefs, incorporate elements of these arguments, and occasionally paraphrase references cited in the briefs. It remains unclear whether the Court uses such arguments to formulate opinions or to justify them. A comparison of the briefs presented by the American Psychological Association and the American Psychiatric Association highlights the challenge to scientific objectivity inherent in participation in the *amicus* process.

The history of the use of empirical behavioral science data in judicial decision-

making, particularly by the Supreme Court, is short, although the frequency with which such data are submitted to the Court has grown rapidly in recent decades. It was not until 1954, in *Brown v. Board of Education*,<sup>1</sup> that the Supreme Court issued an opinion that appeared to be substantially influenced by psychological and sociological studies. Although some of these scientific sources may come to the Court's attention in briefs submitted by the petitioner or respondent,

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a far greater number are derived from *amicus curiae* (friend of the court) briefs.<sup>2</sup> The filing of *amicus* briefs at the appellate level has undergone such extraordinary growth in the last quarter century that such briefs appear in almost all significant precedent-setting cases.<sup>3</sup> Appelbaum<sup>4</sup> has gone so far as to label this “the age of empirical jurisprudence.”

Fundamental differences in conceptual models underlying legal and scientific reasoning have long created difficulties at the interface of psychiatry and the law,<sup>5</sup> with unfortunate consequences for judicial decision-making. For those with a clinical or scientific bent, the increasing use of empirically derived data, presented through *amicus* briefs, should be reassuring. However, the increasing appearance of behavioral science citations in Supreme Court decisions raises a number of important questions about the use of empirical evidence in *amicus* briefs. How and by whom is scientific evidence presented to the court? Given that briefs to the Supreme Court must be filed on behalf of one of the parties to the dispute and are thus adversarial, is it possible to maintain a credibly objective scientific stance? Is it possible to discern evidence that the courts are actually influenced by empirical presentations? Are courts able to discriminate the reliability of the data presented to them? If we can further discern in what ways such evidence appears to be used by the Court, we will perhaps be better positioned to generate the kinds of data that may ultimately influence public policy.

We began to investigate the impact of behavioral science data in the *Washington*

*v. Harper*<sup>6</sup> case after the Supreme Court cited a published study by one of the authors (H.S.) in the text of that decision. *Washington v. Harper* involved the right of a prisoner to refuse antipsychotic medication. Harper, incarcerated at the Washington State Penitentiary in 1976, spent much of his time in the special offender center, a unit for inmates in need of psychiatric treatment. Although he usually consented to medication with antipsychotic agents, during November of 1982 he refused to consent and was eventually medicated involuntarily. Mr. Harper sued, leading the Washington Supreme Court to conclude that the “highly intrusive nature” of antipsychotic medications required that the state could administer them involuntarily to a competent mentally ill inmate only after a full judicial hearing. The Supreme Court ultimately reversed that decision in favor of the clinical/administrative review that had previously been in place in the Washington special offender center.

A Supreme Court review of the right to refuse treatment provides an exceptional laboratory for the investigation of the influence of scientific data on judicial decision-making, in large part because the professional-scientific organizations usually pitted against each other when this issue comes to court view and present the data so differently. The study by Schwartz *et al.*,<sup>7</sup> cited by the court, demonstrated that for many patients, the decision to refuse does not reflect autonomous decision-making, but is rather a transient, illness-induced artifact. The patients in Schwartz’s study, when well, usually expressed gratitude for having been invol-

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untarily medicated and wished to be medicated in the future should they be found psychotic and refusing treatment. The Court cited this study in concluding that the patient's "own intentions will be difficult to assess, and will be changeable in any event. Respondent's own history of accepting and then refusing drug treatment illustrates the point." This then became a building block to the Court's conclusion that a substituted judgement derived by a court in a single judicial hearing can not substitute for "the realities of frequent and ongoing clinical observation by medical professionals."

The nature of the procedural protections of the right to refuse treatment, the distinction between clinical or judicial review of treatment refusal, is central to all right to refuse cases, regardless of patient or prisoner status. Underlying this issue, in turn, is the critical question of the degree of intrusion that the involuntary administration of antipsychotic medication represents. If psychotropic drugs are "mind controlling" and frequently accompanied by horrific side effects, then the degree of intrusion or risk is great and calls for greater procedural protection. If, on the other hand, psychotropic drugs are recognized to "help the individual to regain control of his own mind" and are accompanied by side effects that are generally manageable, then they may be seen as less intrusive, and the ratio of benefit to risk is much higher. Thus the empirical evidence presented to the Court about the efficacy and risks of this class of medication is vital, as is the Court's response to this information. There is, in fact, an extraordinary wealth of data on these issues

and much of it was presented to the Court<sup>8-10</sup> in a variety of briefs that came to diametrically opposed conclusions.

Measuring the impact of empirical data on a judicial decision is a complex matter. Most attempts to do so rely, at least in part, on a citation analysis in which the court's references to the empirical data are counted and catalogued.<sup>11</sup> Although no one can ever know how a judge or judges actually make a particular decision, the citations used, at the very least, reflect the way in which the decision is justified and may suggest the degree to which social science research is viewed by the judiciary as a legitimate basis for decision-making.<sup>12</sup> A content or qualitative analysis, comparing the arguments made in the decision to arguments appearing in the cited literature, may at times provide a more specific indication of the influence of a particular reference.

## Methods

The briefs of each *amicus curiae* filed in the case as well as those of the respondent and petitioner, and the decisions of the majority and the dissent were obtained and reviewed. A quantitative and qualitative analysis was performed on each. The quantitative analysis consisted of a citation analysis performed in the following manner. We obtained every referenced scientific or clinical source cited in the briefs and in the court's opinion and dissent. We excluded legal case citations and articles from the legal literature. We included articles from journals that bridge law and medicine. We read each of these sources and categorized them as follows: original research, review article, clinical

report, essay, behavioral science article (refereed or nonrefereed article from psychiatric or psychological journals), book, or other. For articles that reported original research, we assessed the rigor of the research methodology by considering whether the research was prospective or retrospective, controlled or uncontrolled, blinded or open; we also reported the sample size. We compared the *amicus* briefs, noting the overall numbers of scientific or medical citations in each and contrasting the degree to which these briefs relied on original research, review articles, clinical studies, or essays in their cited sources.

Inasmuch as the conclusions the Court would reach regarding the risks and benefits of antipsychotic medication were fundamental to the case, and because this was the focus of the empirical arguments made in the briefs of the American Psychiatric Association (APA) and the American Psychological Association (APoA), with widely divergent conclusions in each, we further focused on a comparison of these two briefs. We compared their use of original research as opposed to review articles and essays, and their reliance on articles from the medical and mental health journal literature as opposed to book chapters. Focusing on original research citations in these two briefs, we contrasted their reliance on prospective as opposed to retrospective studies, sample size of the studies cited, and use of controls and blind methodologies. Finally, the briefs were contrasted for their reliance on articles from refereed as opposed to nonrefereed journals.

The opinions of the Court's majority and dissenting minority were contrasted

for their reliance on original research as opposed to review articles and essays, and for the degree to which their cited references appeared in refereed as opposed to nonrefereed journals.

In addition to the citation analysis described above, a qualitative analysis was performed that focused on the briefs of the APA and the APoA and the opinions of the majority and the dissent. The qualitative analysis took the form of a content analysis. The majority and dissenting court opinions were reviewed for statements about the benefits and risks of the use of antipsychotic medications. We attempted to ascertain the influences leading to these conclusive statements by noting citations or specific references in the text of these opinions to each brief. In instances in which there were no cited references or specific references to a particular brief in the text of the opinion, we compared the wording of particular statements appearing in the opinion to the wording of analogous statements in these briefs in order to ascertain their influence on the thinking of the court. In those instances in which the opinions of the majority and the dissent cited actual sources from the scientific literature, we ascertained in which brief those sources had been presented. We further reviewed the cited articles and book chapters to determine the degree to which the *amicus* briefs and the opinions of the majority and the dissent appropriately reflected the intent and meaning of the original publications.

## Results

A total of nine *amicus curiae* briefs were filed in this case in addition to the

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briefs of petitioner and respondent. The organizations filing briefs fell into four groups: professional organizations, patient advocacy groups, mental health law organizations (the mental health bar), and government/providers. Two briefs were filed by professional organizations: one by the APoA in support of the respondent and another filed jointly by the APA and the Washington State Psychiatric Association. One brief was filed by a patient advocacy group, The Coalition for the Fundamental Rights and Equality of Ex-patients, in support of the respondent. Three briefs were submitted by organizations or coalitions of organizations that provide legal services to mentally ill individuals. One was submitted by the New Jersey Department of the Public Advocate. Another was filed jointly by the Mental Health Legal Advisors (MHLA) Committee of the Massachusetts Supreme Judicial Court, the Coalition for the Legal Rights of the Disabled, and the Center for Public Representation. A third was filed jointly by the National Association of Protection and Advocacy Systems, the National Association for Rights Protection and Advocacy, Protection and Advocacy, Inc., and Michigan Protection and Advocacy, Inc. Each of these briefs was in support of the respondent. Three briefs were filed in support of the petitioner by government or providers of mental health services. One brief was filed by the federal government, another by the State of California. Another was filed jointly by 10 community mental health centers, psychiatric care centers, hospitals, or medical centers, and other service organizations in the state of Washington, led by the

Washington Community Mental Health Council.

The briefs contained a total of 293 citations from the scientific or clinical literature. Of these, 71 citations appeared in more than one brief, leaving 222 individual references. The brief of the state of California used no citations from the scientific or clinical literature, leaving eight briefs that relied at least in part on scientific or clinical arguments supported by such citations. The total number of citations in these eight briefs was 220. The range was from 14 to 37 and the average was 27.5 citations per brief.

Of these 220 citations, the majority (108) consisted of review articles. Review articles were relied on most heavily in six of eight briefs. Fifty-eight citations reflected original research reports. Only one brief, that of the Coalition for the Fundamental Rights and Equality of Ex-patients, relied most heavily on original research. Eleven citations reflected case reports, and 19 citations consisted of essays. The remainder consisted of book chapters and various other sources.

In a more detailed analysis, we compared the briefs filed by the APA and the APoA. The psychiatric association's brief contained 37 references, and the psychological association's brief contained 27. The reliance on original research, review articles, or essays was approximately the same in each. In the psychiatric association brief, 21 references (57%) consisted of review articles, seven (19%) reflected original research, five (16%) were essays, and the remainder were in the "other" category. The brief of the APoA relied on review articles for 17 citations (63%)

and original research for eight citations (30%); two citations (.07%) were in the "other" category. When the citations contained in the briefs of these two organizations are broken down according to the media in which they appear, we begin to see a distinct difference. In the psychiatric association brief, 27 citations (73%) were derived from medical or mental health-related journals, five (14%) were citations of books or book chapters, two (.05%) appeared in legal journals, and three (.08%) in other sources. In the psychological association brief, 11 citations (41%) were from the medical or mental health-related journals, 13 (48%) were citations of books or book chapters, and three (11%) were derived from other sources.

An analysis of the original research citations used in both briefs revealed remarkable similarities. Of the seven original research citations in the psychiatric association brief, all reflected prospective methodologies. Of the eight original research citations in the psychological association brief, six reflected prospective methodologies and two were retrospective. The studies in both briefs were almost evenly divided between open and controlled methodologies and between double-blinded and unblinded methodologies. The distribution of the sample sizes that formed the basis of the studies used in both briefs was also very similar.

An analysis of the use of review articles revealed similar consistencies. The psychiatric association brief cited review articles 21 times (57%), whereas the psychological association cited review articles 17 times (63%). Each brief relied most heavily on historical reviews, secondarily

on critical analysis, and finally on reviews that were predominantly medicolegal in nature. The most striking similarity in the manner in which these rely on scientific and clinical references was detected in a comparison of the use of articles from refereed as opposed to nonrefereed journals. The brief of the psychiatric association cited 27 articles from medical or mental health journals, 25 (92%) of which were refereed. In the psychological association brief, there were 11 citations from medical or mental health journals, 10 (91%) of which were refereed.

Our analysis focused next on the written opinion of the Supreme Court majority and the written dissent. Seven references from the medical or mental health literature were cited in the opinion of the majority, whereas five were cited in the dissent. None of the citations appearing in the court's opinion or in the dissent had been used in the brief of the psychiatric association. One citation each in the majority opinion and the dissent had been used in the brief of the psychological association. Two citations in the majority opinion were derived from the briefs of the petitioner or respondent, and three citations in the dissent were similarly derived. Of the 293 citations appearing in all of the briefs, 18 were cited by three or more briefs. Of note, of these 18 most frequently cited references, none appears in the opinion of the majority and only one was cited in the opinion of the dissent. The distribution of references by type between the opinion and the dissent paralleled the distribution of sources by type in the briefs. Both the opinion and dissent relied most heavily on review articles. Of

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those articles derived from the medical or mental health literature (five in the opinion and three in the dissent), all were from refereed journals.

Given the obvious limitations of the above citation analysis, we next turned to a qualitative analysis. We began by reviewing the Court's decision and by tracing the arguments therein to sections of the briefs and to cited references from which they appeared possibly to have been derived. We followed the same approach for the dissent.

The Court's statements about antipsychotic medications are spare and to the point and rely heavily on the APA's brief for support:

There is considerable debate over the potential side effects of antipsychotic medications, but there is little dispute in the psychiatric profession that proper use of the drugs is one of the most effective means of treating and controlling a mental illness likely to cause violent behavior.

Here the Court cites pages 10 and 11 of the APA brief, which contain the following:

The most recent comprehensive review of the treatment of schizophrenia published by the National Institute of Mental Health indicated: "Antipsychotic (neuroleptic) drugs remain the primary modality in the treatment of an acute episode or an acute exacerbation of a schizophrenic illness." Kane, "*Treatment of Schizophrenia*," 13 *Schizophrenia Bull* 133, 134 (1987).<sup>8</sup> "The available data do not support the feasibility of substituting any psychotherapeutic strategy for drug treatment on an indefinite basis" *Id.* at 142.

The value of antipsychotic medication for the long-term treatment of chronic psychosis is equally well-established. "Maintenance antipsychotic drug treatment has proved to be of enormous value in reducing the risk of psychotic relapse and rehospitalization. Numerous double-blind, placebo-controlled clinical trials

can be cited to support this conclusion and have been the subject of several review articles." Kane,<sup>8</sup> *supra* at 143.

The Court goes on to conclude that "respondent has failed to demonstrate that physical restraints or seclusion are accepted substitutes for antipsychotic drugs" and again cites the APA brief to that effect.

The APA brief in turn emphasizes that "antipsychotics are not simply pharmacological alternatives to physical restraints . . ." but rather act to ". . . clear the hallucinations and delusions that are produced by psychosis" citing Appelbaum and Gutheil in the *Bulletin of the American Academy of Psychiatry and the Law*<sup>13</sup> and Spohn in the *Archives of General Psychiatry*.<sup>14</sup>

The Court states the following in regard to the risks of antipsychotics:

While the therapeutic benefits of antipsychotic drugs are well documented, it is also true that the drugs can have serious, even fatal, side effects. One such side effect identified by the trial court is acute dystonia, a severe involuntary spasm of the upper body, tongue, throat, and eyes. The trial court found that it may be treated and reversed within a few minutes through use of the medication Cogentin. Other side effects include akathisia (motor restlessness, often characterized by an inability to sit still); neuroleptic malignant syndrome (a relatively rare condition which can lead to death from cardiac dysfunction); and tardive dyskinesia, perhaps the most discussed side effect of antipsychotic drugs. Tardive dyskinesia is a neurological disorder, reversible in some cases, that is characterized by involuntary, uncontrollable movements of various muscles, especially around the face. The State, respondent, and *amici* sharply disagree about the frequency with which tardive dyskinesia occurs, its severity, and the medical profession's ability to treat, arrest, or reverse the condition. A fair reading of the evidence, however, suggests that the proportion of patients treated with antipsychotic drugs who exhibit the symptoms of tardive dyskinesia ranges from 10% to 25%. According to the American Psychiatric Association, studies of the condition

indicate that 60% of tardive dyskinesia is mild to minimal in effect, and about 10% may be characterized as severe.

The dissent is concerned with "discount[ing] the severity of these drugs." See *post*, at 3, n. 5. As our discussion in the text indicates, we are well aware of the disagreements in the medical profession over the frequency, severity, and permanence of these side effects. We have set forth a fair assessment of the current state of medical knowledge about these drugs.

What the dissent 'discount[s] are the benefits of these drugs, and the deference that is owed to medical professionals who have the full-time responsibility of caring for mentally ill inmates like respondent and who possess, as courts do not, the requisite knowledge and expertise to determine whether the drugs should be used in an individual case.'

These conclusions very much parallel the argument made in the APA brief, which is thoroughly referenced.

Let us contrast this now with the dissent authored by Justice Stevens with Justices Brennan and Marshall concurring in part and dissenting in part:

That Harper would be so opposed to taking psychotropic drugs is not surprising as the Court acknowledged, these drugs both "alter the chemical balance in a patient's brain" and can cause irreversible and fatal side effects. The prolixin injections that Harper was receiving at the time of his statement exemplify the intrusiveness of psychotropic drugs on a person's body and mind. Prolixin acts "at all levels of the central nervous system as well as on multiple organ systems." It can induce catatonic-like states, alter electroencephalographic tracings, and cause swelling of the brain. Adverse reactions include drowsiness, excitement, restlessness, bizarre dreams, hypertension, nausea, vomiting, loss of appetite, salivation, dry mouth, perspiration, headache, constipation, blurred vision, impotency, eczema, jaundice, tremors, and muscle spasms. As with all psychotropic drugs, prolixin may cause tardive dyskinesia, an often irreversible syndrome of uncontrollable movements that can prevent a person from exercising basic functions such as

driving an automobile, and neuroleptic malignant syndrome, which is 30% fatal for those who suffer from it. The risk of side effects increases over time.

The Washington Supreme Court properly equated the intrusiveness of this mind altering drug treatment with electroconvulsive therapy or psychosurgery. It agreed with the Supreme Judicial Court of Massachusetts' determination that the drugs have a " 'profound effect' on a person's 'thought processes' and a 'well-established likelihood of severe and irreversible adverse side effects,' and that they therefore should be treated 'in the same manner we would treat psychosurgery or electroconvulsive therapy'."

The dissent castigates the majority for relying "heavily on the brief filed by the American Psychiatric Association . . . to discount the severity of these drugs. However, medical findings discussed in other briefs support the conclusions of the Washington Supreme Court and challenge the reliability of the Psychiatrists' Brief. For example, the Brief of the American Psychological Association as *Amicus Curiae* (Psychologists' Brief) points out that the observation of tardive dyskinesia has been increasing 'at an alarming rate' since the 1950-1970 data relied on by the Psychiatrists' Brief 14-16, and that 'the chance of suffering this potentially devastating disorder is greater than one in four'."

The dissent relies heavily on the Psychologists' Brief. Here are elements of the APoA brief that helped to shape the dissent:

Antipsychotics are potent, mind-altering drugs that cause disabling and potentially incurable disorders. They have grave effects, inherent potential for abuse and an actual history of indiscriminate use by the psychiatric profession.

The antipsychotic drugs at issue have powerful effects on a person's ability to think and feel, and on his sense of self.



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. . . the scientific literature, as well as scores of pending lawsuits, show that psychiatrists, far from acting wisely, often prescribe antipsychotic drugs indiscriminately, risking serious and irreparable harm to patients.

. . . this court and the lower courts repeatedly have noted the unreliability of psychiatric judgments, and have rejected the psychiatric profession's demand for unlimited discretion.

The APoA brief goes on at great length about the dangers of antipsychotic drugs, arguing that the state and the APA ignore these dangers and claiming that: "The persistent disregard of factual evidence by both the State and the psychiatric profession discredits their contention that they can unquestioningly be trusted to use unbiased clinical judgement in prescribing such drugs for prisoners. . . ."

The litany of side effects listed in the APoA brief is not technically incorrect but it is equivalent to a listing of everything cited in the *Physicians Desk Reference* (and then some), with no attempt to specify frequency of occurrence. For instance, tardive dyskinesia is described at length. Its more severe forms are given the lengthiest description, and a claim that more than one in four patients may develop tardive dyskinesia leaves the impression that this is true for the more severe forms of the disorder. Inasmuch as the brief cites appropriate, authoritative sources, it builds its argument through such subtle distortions. It occasionally goes further. For instance, although mild tardive dyskinesia (most cases) often remits spontaneously some time after drug discontinuation, the brief states that ". . . once symptoms become manifest, it is unlikely that they will disappear—even if medication is discontinued." They were

undoubtedly referring to more severe forms of tardive dyskinesia, but aid the development of their argument by failing to make this clear. The brief continues:

In sum, antipsychotic drugs have both an inherent potential for abuse and an actual history of indiscriminate use by the psychiatric profession. In this respect they are similar to psychosurgery and electroshock therapy, highly invasive treatments which psychiatrists embraced enthusiastically and used indiscriminately—until their tragic effects became publicized and their use was curtailed by legislative, judicial and scientific pressure. Because many psychiatrists will not heed the warnings in the scientific literature as to the dangers and misuse of neuroleptic drugs, independent and unbiased decision makers should decide whether orders for forced medication are necessary.

It is noteworthy that the APoA brief goes far beyond objective analysis of antipsychotic use to a direct vilification of the psychiatric profession unmatched by any comparable attack upon psychologists in the APA brief. Whereas the APoA consistently refers to the bias of psychiatrists, the bias of this brief is suggested in its recommendations:

An impartial decision maker should review the [medication] question with benefit of input by professionals such as psychologists who are expert in non-drug treatment alternatives, and without an invariable bias in favor of medication.

To be optimally effective, the choice of drug therapy should be informed by neuropsychological and psychological assessments and often must be accompanied by behavioral and other therapy.

## Discussion

Our study has attempted to examine the influence of behavioral science data, marshalled into the arguments of *amicus curiae* briefs, on Supreme Court decision-

making. We have focused on the Court's opinion and the dissent in *Washington v. Harper*,<sup>6</sup> a right to refuse treatment case, in part because interpretation of the scientific data regarding the risks and benefits of antipsychotic medication has long been a contentious issue for the courts. It should be abundantly clear that no method of analysis can ever ascertain with certainty the internal decision-making process of a court. Certainly any quantitative method can only reflect trends. Nevertheless the citation analysis used here is of interest as much for indicating what does not influence the Court as for indicating what may influence it.

The citation analysis of the *amicus* briefs themselves reveals that the briefs rely on a wide variety of scientific sources. Some briefs can be discredited by citation analysis, such as those making claims unsupported by research and relying heavily on nonrefereed journals (e.g., the brief of the MHLA).

Reviewing the opinion and dissent for citations, we note that the Court generally cites a section of a brief (which may be heavily referenced in itself) rather than a scientific source directly from within the brief. Direct citations were infrequent (seven in the opinion and five in the dissent). Of note, when the Court does cite a source directly, it is in each instance an article from a refereed journal. Although one would like to take encouragement from the use of refereed as opposed to nonrefereed sources, our sample is too small to conclude that this seeming preference was other than chance. Our study is further flawed by our failure to consider citations in the legal literature, as it has

been noted that judges are more apt to cite legal articles that review clinical/scientific data than the clinical/scientific articles themselves.<sup>12</sup>

One of our most interesting yet discouraging findings regards the court's failure to rely on those few sources that were most commonly cited in multiple briefs. Of the total of 293 unique citations, 18 were cited in three or more briefs. We hypothesized that, because there was a consensus of sorts between briefs that these were important articles, they would be more likely to be referenced by the court. Remarkably, of these 18 most frequently cited references, none appeared in the opinion of the majority and only one was cited in the opinion of the dissent.

Our citation analysis failed to distinguish substantially between the briefs of the APA and the APoA. Both relied to a remarkably equivalent degree on original research reports and refereed publications. We must turn to a qualitative analysis if we are to proceed with our understanding of the influence of empirical argument on the court's decision-making.

It is clear from our qualitative analysis that both the majority and dissenting opinion in *Washington v. Harper*<sup>6</sup> refer to arguments contained in the briefs. It remains impossible to determine if the data presented in the briefs actually played a role in the formulation of opinions or were merely used to justify them. However, as our analysis shows, at a number of points the analyses of the majority and of the dissent closely parallel the arguments presented in the briefs of the psychiatric and psychological associations.

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At those points in which either opinion directly refers to a portion of a brief in making its argument, it implies endorsement of the references cited within that portion of the brief. There is some evidence that the court may read at least some of the sources cited in the briefs. This is illustrated by the way in which the majority opinion reflects the contents of the article by Schwartz *et al.*<sup>7</sup> rather than any statement about the article contained in a brief.

However one may feel about the appropriateness of the majority's conclusions in this case, it is perhaps most notable that a sizeable minority came to virtually opposite conclusions, accepting a diametrically opposed reading of the empirical evidence. These diametrically opposed readings reflected the differing positions of two credible professional organizations. It is not unreasonable to suppose that, when presented with two seemingly credible but opposite views of the behavioral science data, members of the court will select those arguments most in line with their predispositions. This is in keeping with the argument that courts use empirical data to justify their decisions rather than to formulate them.<sup>12</sup> In fact the arguments presented in any decision may reflect other agendas held by the Court, which are never addressed directly in the briefs, the decision, or the dissent; for instance, an overarching reluctance to substitute judicial decisions for psychiatric ones, which occurs as an underlying theme in Supreme Court decisions over time.<sup>15</sup>

Still another confounding factor is the way in which the Court may be influ-

enced in the present case by material presented in *amicus* briefs in earlier cases. In this regard, Stone has observed that it is important to view the Court over time. He writes, ". . . I have worked very hard on one brief, but none of the ideas seemingly had any influence on the court. However, in subsequent decisions by the court I found language from the earlier *Amicus* Brief. Apparently some Justices will on occasion read something in a brief which catches their fancy and they apply it in subsequent cases" (A. Stone, personal communication, May 30, 1991).

We conclude as we started: ascertaining the influence on the Supreme Court of behavioral science data presented in *amicus* briefs is a complicated and uncertain enterprise. It is well established that the use of such briefs has grown dramatically over the last generation. Whatever skepticism one may hold about their actual impact, it is demonstrably clear, as the decision and dissent in *Washington v. Harper* illustrate, that the Court incorporates arguments from these briefs into its own, cites references from the briefs and, on occasion, paraphrases these references. Although the briefs submitted by the APA and the APoA purported to summarize the scientific data regarding the risks and benefits of antipsychotic medication, they came to differing conclusions in accord with the underlying perspectives and interests of each organization.

*Amicus* briefs are filed in an unequivocally adversarial process. The implication of objectivity that generally attaches to empirical investigation and would be expected to apply to reviews of scientific data is challenged by the context in which

these reviews are prepared. This should give at least some pause to professional organizations confronting the ethical challenge of distinguishing between scientific review and advocacy.<sup>11, 16</sup>

As we have noted, empirical data may help the Court come to a decision or, alternatively, may be used to support a decision already made. In either case, the Court certainly uses these data. This creates an obligation for behavioral scientists to generate the kind of research necessary to provide the data on the many critical issues that sit at the interface of psychiatry and the law and to marshal the data with objectivity in their presentations to the courts.

#### References

1. *Brown v. Board of Education*, 347 U.S. 483 (1954)
2. Acker JR: Social science in Supreme Court criminal cases and briefs: the actual and potential contribution of social scientists as *amici curiae*, in *Reforming the Law: Impact of Child Development Research*. Edited by Melton GB. New York: Guilford Press, 1987
3. Tremper CR: The high road to the bench: presenting research findings in appellate briefs, in *Reforming the Law: Impact of Child Development Research*. Edited by Melton GB. New York: Guilford Press, 1987
4. Appelbaum PS: The empirical jurisprudence of the United States Supreme Court. *Am J Law Med* 13:335-49, 1987
5. Gutheil TG, Mills MJ: Legal conceptualizations, legal fictions, and the manipulation of reality: conflict between models of decision making in psychiatry and law. *Bull Am Acad Psychiatry Law* 10:17-27, 1982
6. *Washington v. Harper*, 110 S Ct 1028 (1990)
7. Schwartz HI, Vingiano W, Bezirgianian, Perez C: Autonomy and the right to refuse treatment: patients' attitudes after involuntary medication. *Hosp Community Psychiatry* 39:1049-54, 1988
8. Kane JM: Treatment of schizophrenia. *Schizophrenia Bull* 13:133-56, 1987
9. Baldessarini RJ, Lipinski JF: Risks of antipsychotic drugs overemphasized. *N Engl J Med* 305:588-9, 1981
10. American Psychiatric Association: Task Force Report 18: Tardive Dyskinesia. Washington, DC: APA, 1980
11. Roesch R, Golding SL, Hans VP, Reppucci ND: Social science and the courts: the role of *amicus curiae* briefs. *Law Hum Behav* 15:1-11, 1991
12. Hafemeister TL, Melton GB: The impact of social science research on the judiciary. in *Reforming the Law: Impact of Child Development Research*. Edited by Melton GB. New York: Guilford Press, 1987
13. Appelbaum PS, Gutheil TG: Rotting with their rights on: constitutional theory and clinical reality in drug refusal by psychiatric patients. *Bull Am Acad Psychiatry Law* 7:306-15, 1979
14. Spohn HE, Lacoursiere RB, Thompson K, Coyne L: Phenothiazine effects on psychological and psychophysiological dysfunction in chronic schizophrenics. *Arch Gen Psychiatry* 34:633-44, 1977
15. Appelbaum, PS: The Supreme Court looks at psychiatry. *Am J Psychiatry* 141:827-35, 1984
16. Grisso T, Saks MJ: Psychology's influence on constitutional interpretation: a comment on how to succeed. *Law Hum Behav* 15:205-11, 1991