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**Estimating the Effect of Non-English Speaking Hispanic on
Personal Injury Jury Trial Outcomes**

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Estimating the Effect of Non-English Speaking Hispanic on Personal Injury Jury Trial Outcomes

ABSTRACT

This research provides empirical evidence on the effects of being a non-English speaking Hispanic on personal injury jury trial outcomes. The study uses a new and unique data set, and finds that English-speaking Hispanics fare better in the courtroom setting (i.e., at trial) than their non-English-speaking counterparts. In particular, a non-English speaking Hispanic is 15 percent *less* likely than an English speaker to obtain a better jury trial verdict than the last settlement offer. The finding has important ramifications for the legal strategies of attorneys who may take this information into account before deciding to go to trial. Moreover, the results highlight some of the differences that remain in the US for non-English speaking persons as well as some of the legal difficulties faced by Hispanics. The finding should also be of interest to policymakers, lawmakers, judges and community leaders who deal with Hispanic issues. Our research is a natural extension of the recent *SSQ* paper by Rose et al. (2008) who found that Spanish-speaking Hispanics express less trust in juries than non-Hispanic whites and other English-speaking persons. In fact, our findings may be interpreted as providing an economic rationale for this distrust.

INTRODUCTION

Demographically, the United States is changing at a phenomenal pace and rate. In fact, according to the 2007 Statistical Abstract of the United States, while the overall United States population grew by only 5.3 percent from 2000 to 2005, the Hispanic or Latino population grew by nearly 21 percent. Overall, it is expected that by the year 2015, persons of Hispanic origin will comprise 17 percent of the entire US population (Census Bureau). Moreover, the Census Bureau also reported that in the year 2000 the majority of Hispanics and Latinos lived in the Southern and Western states, where they accounted for 33 percent and 44 percent of the populations in those regions, respectively. In Texas, for example, nearly 35 percent of the residents are of Hispanic or Latino origin. Hispanics account for 26, 32, and 52 percent of the populations in the cities of Dallas-Fort Worth, Houston, and San Antonio, respectively.

Confounding the issue of changing demographics is that 19 percent of the US population (5 years and over) speak a language at home other than English (2007 US Statistical Abstract, Table 52). In the Texas cities of Dallas, Fort Worth, Houston, and San Antonio, anywhere from 25 to 40 percent of households report that Spanish is the language spoken at home and 14 to 25 percent of households report that they speak English less than “very well”. (2007 US Statistical Abstract, Table 53) Thus, it is not surprising that immigration and English-only laws are hot political, economic, and civil rights topics (see, for example, Zavodny, 2000). Nevertheless, it bears reminding that the United States was founded upon various “rights,” one of them being the right to a fair and impartial jury trial. As such, the purpose of this paper is to examine whether there are differences in jury trial outcomes based upon whether or not a person testifies in English. In order to examine the issue of language-neutrality in the court room, we utilize a unique data set comprised of the outcomes from over 200 personal injury verdicts drawn from the experiences of a nationally known law firm located in Dallas, Texas.

We explore the issue of whether or not the language in which a Hispanic plaintiff testifies influences the outcome in a personal injury trial. Specifically, we estimate an econometric model of a common measure of jury outcome in personal injury law. The model allows us to compute the change in the probability of a personal injury jury verdict coming in at a lesser dollar amount than the last settlement offer made that can be attributable to the fact that the injured party did not testify in English.

In a recent study, Rose et al. (2008) provided evidence to support the claim that Spanish-speaking Hispanics express less trust in juries than non-Hispanic whites and other English-speaking persons. They suggest that “faith in the jury as a more

trustworthy decision-making body [than a judge] is weakest among those groups that have a history of discriminatory treatment in the legal system and who are less acculturated on other measures, such as language dominance.” Rose et al. (2008) close their article by noting that “further work in this area is warranted because trust in the jury reflects a faith people have in something that is uniquely American.... Thus, understanding whether and in what ways people trust the jury tells us something distinct and important about how people view their communities, as well as how people think their community views them.” (p. 389) Our research extends and builds on that by Rose et al. (2008). Specifically, we focus on how the non-English speaking Hispanic plaintiff is treated by the jury by examining verdict outcomes in personal injury lawsuits.

BACKGROUND AND DATA

Within the legal profession that practices personal injury law, it is generally presumed that if a plaintiff speaks English well enough to be understood by the general public (i.e., a pool of potential jurors), then his or her attorney would have that testimony be in English. However, for Hispanic individuals who do not speak English very well or perhaps not at all, they must testify in Spanish which necessarily results in the use of a translator and perhaps some loss in communication with the jury. As a result, less than optimal communication between the plaintiff and the jury may result. Additionally, testifying in Spanish may subject the plaintiff from an underrepresented group to various biases, discrimination, prejudices, etc. Kerr et al (1996) noted that these effect may be especially prevalent or strong in group contexts (such as a jury of twelve individuals).

The economics and social sciences literature notes that non-English speaking Hispanics experience worse labor market outcomes than those more fluent in English (Stolzenberg and Tienda, 1997; McManus et al., 1983). Focusing on immigrants, Gonzalez (2000) found labor market returns on oral English proficiency to be greater than the returns on literacy skills such as writing and reading, thus highlighting the positive impact that being able to speak English has on the lives of Hispanics. Generally, English language skills are important factors in determining the labor market earnings of Hispanic workers (Mora and Dávila, 2007, 2006; Dávila and Mora, 2004). It is natural to wonder if the negative impacts associated with lower levels of English proficiency translate into other realms of society, particularly into the court room.

In order to examine whether or not a plaintiff's testimony in Spanish influences the relative outcome of the jury trial, we utilize a unique data set specifically collected for this purpose. However, before proceeding, we note that the goal of a personal injury plaintiff's attorney is to obtain the highest award whether through trial verdict or settlement. As such, a "win" at trial is really comprised of two parts. First, the verdict must be in the plaintiff's favor and second the jury's award must exceed the last settlement offer. Anything less than that, and the plaintiff would have done better monetarily by accepting the last settlement offer before the verdict was reached. Of course, the outcomes of the jury trial (i.e., both verdict and award amount) are uncertain. Any information that can be used to help predict the trial outcome would be useful to both plaintiff and defense attorneys in determining their legal strategies and relative bargaining strengths.

The data set contains information on 223 jury verdicts from Motor Vehicle Administration (MVA) cases from the north Texas area. The cases were randomly selected without any review of the facts or specifics of the case. Due to confidentiality agreements, the name(s) of the law firm(s) and attorneys can not be revealed. The observations cover the period of 1996-2007 and involve only personal injury verdicts. Specifically, the data set includes the following information: plaintiff's age, race and gender, county in which the trial took place (from which we construct a binary variable that indicates whether or not the trial was in the Dallas-Fort Worth Metroplex), and whether or not the plaintiff could testify in English. For privacy purposes, no other information (e.g., name, social security number, etc.) that may identify the parties involved in the lawsuit was utilized in the construction of the data set. For the purpose at hand, we use the term "Hispanic" to designate a person from a Spanish-speaking country or their descendants.

The average age of the plaintiffs was 42 and the range was from 9 to 87. Only 2 percent of the sample was African-American (BLACK) while 57 percent were Hispanic and the remaining individuals were white. Males accounted for 47 percent of the sample and 80 percent of the cases were tried in the greater Dallas-Fort Worth area (METROPLEX). Demographic information such as age, race and gender often influences labor market, economic, and social outcomes. Thus, we include these variables as controls for factors that may influence jury verdicts.

Additionally, we construct a set of binary variables to control for the year in which the trial took place (e.g., $D_{1997} = 1$ if the trial took place in 1997 and equals 0 otherwise). The use of the year dummy variables will help to (roughly) control for

economic and social trends as well as differences in the general state of the economy over the sample period.

The trial verdict amount may conceivably exceed, equal or be less than the last settlement offer; however, in no case did the last settlement offer actually equal the trial verdict amount. Note that the trial verdict amount could also be zero as the plaintiff could lose his or her case. Thus, LAST OFFER = 1 if the last settlement offer was greater than (or equal to) the trial verdict amount. Otherwise, LAST OFFER = 0. In 57 percent of the cases tried, the verdict amount was less than the last settlement offer.

In all, 38 percent of the plaintiffs did not speak English and all of these individuals were Hispanic. Accordingly, we defined NEH = 1 if the plaintiff was a non-English speaking Hispanic and thus testified in Spanish. Otherwise, NEH = 0. Table 1 provides descriptive statistics and a summary of variable definitions.

METHODOLOGY AND RESULTS

In order to examine the issue of non-English speaking testimony and jury verdict outcomes, we begin by conducting a chi-squared analysis of LAST OFFER and NEH. The chi-squared test statistic is 1.5 ($p = 0.22$) and suggests that there is no difference in the distribution or pattern of LAST OFFER by whether or not the plaintiff is a non-English speaking Hispanic. However, other factors such as year of trial, location, gender or age may play a role in the jury verdict process. Failure to control for these factors may lead to incorrect inference through a type of omitted variable bias. Thus, we proceed to a more sophisticated econometric investigation.

An estimation technique that is well-suited for such a task is the logistic regression model or logit (Finkelstein and Levin, 2001). In a logit model the dependent variable is of a binary construction, that is, it takes on either the value of one or zero. A positive (negative) and significant coefficient on an explanatory variable indicates that the probability of the dependent variable taking on the value of one is positively (negatively) correlated with the explanatory variable. Technically, the estimated coefficients on the set of explanatory variables (or controls) give the effect of changes in the independent variable on the logarithm of the ratios of probabilities. The model assumes that the error terms follow a Weibull distribution, is estimated using the method of maximum likelihood, and utilizes robust standard errors. Following is the empirical specification of the model:

$$\text{LAST OFFER}_i = \alpha + \beta_1(\text{NEH})_i + \beta_2(\text{AGE})_i + \beta_3(\text{BLACK})_i + \beta_4(\text{METRO})_i + \beta_5(\text{MALE})_i + (\text{Vector of Year Dummies})\boldsymbol{\mu} + \text{Error}_i$$

Insight into the effect of the plaintiff being a non-English speaking Hispanic (NEH) on the probability of the last settlement offer exceeding the trial verdict amount is found by examining the coefficient on NEH (β_1).

We assume the probability that the last settlement offer is greater than the trial verdict depends on personal and demographic characteristics, the year in which the trial took place, and on whether or not the individual was able to testify in English. The set of control variables was chosen to be consistent with prior research that found such factors as to be important determinants of labor, economic, and social outcomes. The results of the analysis are not sensitive to changes in model specification. To be sure, several versions of the model were estimated and the findings were qualitatively unchanged.

Furthermore, the estimated residuals were free of any problems as indicated by several diagnostic checks.

Results of the logit model are presented in Table 2. We find the probability of NEH to be negatively and significantly correlated with the last settlement offer exceeding the verdict amount, controlling for several independent variables. Moreover, the magnitude of the effect which being a non-English speaking Hispanic has on the probability of LAST OFFER = 1 is roughly equal to the coefficient on NEH multiplied by the mean of LAST OFFER, times one minus the mean of LAST OFFER. Performing this calculation we find that non-English speaking Hispanics are about 15 percent less likely to have the last settlement offer exceed their jury verdict, everything else being equal. This finding suggests that testifying in a language other than English (i.e., Spanish) has a negative impact on obtaining a better outcome than was offered prior to the verdict being rendered.

In terms of the explanatory variables, only the year in which the case went to trial appeared to be statistically significant. As a group, the year dummy variables were statistically significant via a chi-squared joint hypothesis test ($p = 0.0000$). Additionally, METRO was positively related to LAST OFFER but only marginally significant ($p = 0.17$).

DISCUSSION AND CONCLUDING REMARKS

This research provides empirical evidence on the effects of being a non-English speaking Hispanic on personal injury jury trial outcomes. The study uses a new and unique data set, and finds that English-speaking Hispanics fare better in the courtroom setting (i.e., at

trial) than their non-English-speaking counterparts. In particular, a non-English speaking Hispanic is 15 percent *less* likely than an English speaker to obtain a better jury trial verdict than the last settlement offer. Our finding also raises profound questions about the right to a fair jury trial. That right being one of the foundational bedrocks of the United States Constitution. Further, the results raise profound questions about the economic and social affects of language in the US.

Our finding has important implications for the legal strategies of attorneys who may take this information into account before deciding to go to trial. Of course, the outcomes of the jury trial (i.e., both verdict and award amount) are uncertain. Any information that can be used to help predict the trial outcome would be useful to both plaintiff and defense attorneys (and their clients) in determining their legal strategies and relative bargaining strengths. For instance, attorneys who represent non-English speaking Hispanic clients will want to explain the language effects on trial outcomes to their clients. The attorney may advise the client that unless he or she can testify in English, the last settlement offer may be preferred to trial, since the chances of exceeding this offer at trial are significantly less than if the testimony were in English. Of course, a game may result in which insurance companies and defendants, who know the plaintiff will not be testifying in English, may respond by offering much less to settle the case than they do English speakers. Whether that raises a constitutional disparate treatment argument and the modeling of such game-theoretic behavior is the topic for future research.

Moreover, our finding highlights some of the differences that remain in the US for non-English speaking persons as well as some of the legal difficulties faced by

Hispanics. The finding that jury verdicts may not be language-neutral should also be of interest to policymakers, lawmakers, judges and community leaders who deal with Hispanic issues. Our research is a natural extension of the recent *SSQ* paper by Rose et al. (2008) who found that Spanish-speaking Hispanics express less trust in juries than non-Hispanic whites and other English-speaking persons. In fact, our findings may be interpreted as providing an economic rationale for this distrust.

Table 1 – Descriptive Statistics and Variable Definitions

	AGE	BLACK	MALE	METRO	LASTOFFER	NEH
Mean	42.	0.0223	0.4688	0.8036	0.5695	0.3795
Median	40.5	0.0000	0.0000	1.0000	1.0000	0.0000
Maximum	87	1.0000	1.0000	1.0000	1.0000	1.0000
Minimum	9	0.0000	0.0000	0.0000	0.0000	0.0000
Std. Dev.	13.05	0.1481	0.5001	0.3982	0.4963	0.4863

AGE = age of plaintiff

BLACK = 1 if plaintiff was African-American, 0 otherwise

METRO = equals 1 if trial was in the Dallas-Fort Worth Metroplex, 0 otherwise

MALE = 1 if plaintiff was male, 0 otherwise

LASTOFFER = 1 if last settlement offer \geq verdict amount to plaintiff, 0 otherwise

NEH = 1 if plaintiff was non-English speaking Hispanic, 0 otherwise

Sample size = 223

Table 2. Summary of Logit Model Results: Dependent Variable is “LAST OFFER”

Variable	Coefficient	Std. Error	z-Statistic	Prob.
Non-English Speaking				
Hispanic (NEH)	-0.6040	0.3228	-1.8715	0.0613
Constant	1.6060	1.2807	1.2540	0.2098
D1997	-2.3856	1.1940	-1.9981	0.0457
D1998	-2.5481	1.1819	-2.1560	0.0311
D1999	-1.9142	1.1743	-1.6301	0.1031
D2000	-1.6361	1.1574	-1.4136	0.1575
D2001	-1.4566	1.2074	-1.2064	0.2277
D2002	-0.9772	1.2079	-0.8090	0.4185
D2003	33.4523	1.1668	28.6706	0.0000
D2004	-2.1810	1.2529	-1.7407	0.0817
D2005	-1.5175	1.5596	-0.9730	0.3306
D2006	-0.6482	1.2479	-0.5194	0.6035
D2007	-0.6060	1.1799	-0.5136	0.6076
AGE	-0.0021	0.0120	-0.1769	0.8596
BLACK	0.7315	1.2371	0.5913	0.5543
METRO	0.5898	0.4256	1.3858	0.1658
MALE	0.0147	0.3009	0.0489	0.9610
LR statistic (16 dof)	40.63	McFadden R-squared		0.1333
Probability(LR stat.)	0.0006			
Obs with Dep=0	96	Total observations		223
Obs with Dep=1	127			

Method: ML - Binary Logit (Quadratic hill climbing)
 QML (Huber/White) standard errors & covariance

REFERENCES

2007 Statistical Abstract of the United States, Census Bureau.

Davila, Alberto and Marie T. Mora. (2004) English-Language Skills and the Earnings of Self-Employed Immigrants in the United States: A Note, *Industrial Relations* 43:2, 386-391.

Finkelstein, Michael O. and Bruce Levin, Statistics for Lawyers, Second Edition, Spring, 2001.

Gonzalez, Arturo (2000) The Acquisition and Labor Market Value of Four English Skills: New Evidence from NALS, *Contemporary Economic Policy* 18 (3), 259–269.

Kerr, Norbert L., Robert J. MacCoun and Geoffrey P. Kramer (1996) Bias in Judgments: Comparing Individuals and Groups, *Psychological Review* 103, 687-719.

McManus, Walter, William Gould, and Finis Welch (1983) Earnings of Hispanic Men: The Role of English Language Proficiency, *Journal of Labor Economics* 1 (2) 101-130.

Mora, Marie T. and Alberto Dávila (2007) Hispanic Ethnicity, Gender, and the Change in the LEP-Earnings Penalty in the United States During the 1990s, *Social Science Quarterly* 87:s1, 1295-1318.

Mora, Marie T. and Alberto Dávila (2006) A Note on the Changes in the Relative Wages of LEP Hispanic Men between 1980 and 2000, *Industrial Relations* 45:2, 169-172.

Rose, Mary R., Christopher Ellison, and Shari Seidman Diamond (2008) Preferences for Juries Over Judges Across Racial and Ethnic Groups, *Social Science Quarterly* 89 (2), 372–391.

Stolzenberg, Ross M. and Marta Tienda (1997) English Proficiency, Education, and the Conditional Economic Assimilation of Hispanic and Asian Origin Men, *Social Science Research* 26 (1), 25-51.

Zavodny, Madeline (2000) The Effects of Official English Laws on Limited English-Speaking Workers, *Journal of Labor Economics* 18 (3), 427-452.