

# Improving Jury Instructions: The Effect of Linguistic and Procedural Factors<sup>1</sup>

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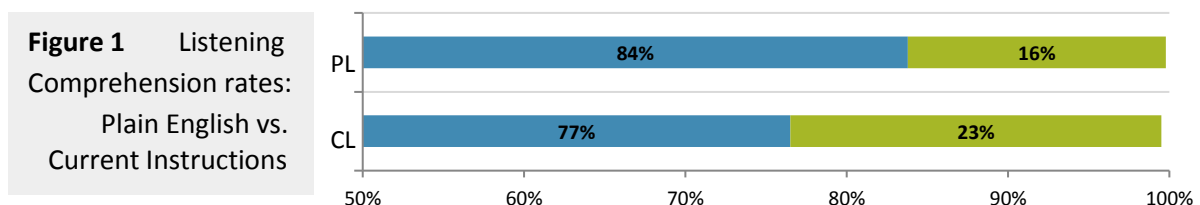
**Background.** A growing problem confronts US courtrooms: jury instructions are often incomprehensible, especially to those with little education or rudimentary English (Charrow & Charrow 1979; Elwork, et. al. 1982; Diamond 2003; Diamond, Murphy & Rose 2012; Tiersma 2009). This excludes many jurors from equal participation but, worse, has led to misinformed verdicts (Benson 1985; Marder 2006). Many states are now taking action and a Massachusetts Bar Association Jury Instruction Task Force -- aided by linguists -- is joining them.

Before proposing changes to Massachusetts jury instructions, the Task Force felt it necessary to research the kinds of problems that current jury instructions pose. This paper gives an overview of a set of studies we have conducted to investigate the problems that jury instructions pose and possible solutions. We investigated three hypotheses: Hypothesis [1] Massachusetts current jury instructions are easier to comprehend if they are reworded in “Plain English”; Hypothesis [2] The difficulties of the current instructions relate to *linguistic features* of the instructions; and Hypothesis [3] reading the instructions while listening to them will improve comprehension over listening alone. We report here evidence (a) from undergraduate students, and (b) from a more diverse group of subjects, Amazon MTurk participants, who more closely match the Massachusetts jury pool.

## Study 1: Current Instructions vs. Plain English Instructions

In order to test Hypothesis 1, we rewrote 6 current Massachusetts jury instructions in plain English. 58 undergraduate students participated in Study 1 and were randomly assigned into two conditions (Current vs. Plain English); half of them listened to six recordings of current jury instructions, and half of them listened to six recordings of Plain English jury instructions. After hearing each recording, participants were asked to answer a set of true/false questions to measure their comprehension.

As shown in Figure 1, comprehension rates in the **Plain English Listening** condition were significantly higher than that in the **Current Listening** condition, 84% vs. 77% ( $p < .05$ ), confirming Hypothesis 1.

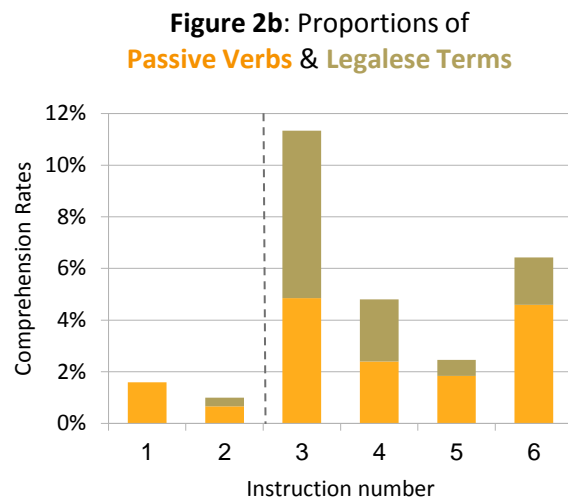
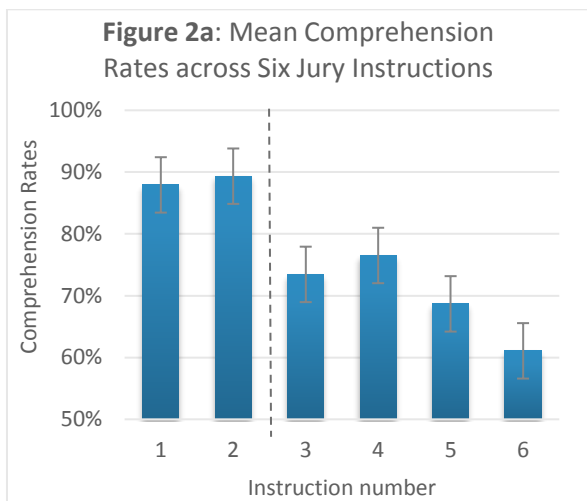


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## Study 2: Linguistic Features of the Current Instructions Contribute to their Comprehension Difficulty: Passive Verbs and Legalese Terms

Based on the results of Study 1, we tested a second hypothesis: Hypothesis 2: The difficulties of the current instructions relate to *linguistic features* of the instructions; more specifically, we hypothesized that comprehension rates will be inversely correlated with two linguistic features, passive verbs and legalese terms. To test this, we computed the rates of occurrence of these two features in each of the six current jury instructions.

As shown in Figure 2a, comprehension varied across the instructions. As hypothesized, comprehension rates inversely correlated with two linguistic factors (Fig. 2b): **passive verbs** and **legalese** terms. Results clustered in two groups: “easy” Instructions 1 & 2, which contained lower rates of these two factors, showed the highest comprehension rates; “difficult” Instructions 3, 4, 5 and 6, which contained higher rates of passive verbs and legalese terms, showed lower comprehension rates. This pattern supported Hypothesis 2: linguistic factors such as passive verbs and legalese terms contribute to the comprehension difficulty of current jury instructions.



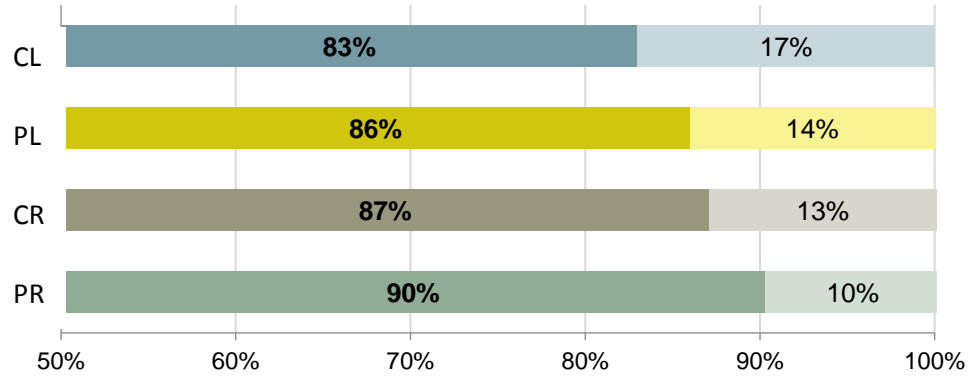
## Study 3: Reading While Listening Improves Comprehension

Study 3 was aimed at testing Hypothesis 3: Reading the instructions while listening to them will improve comprehension over listening alone. 214 undergraduate students participated in the study. They listened to recordings of either 6 Current (C) or 6 Plain English (P) instructions and answered true/false questions after each recording. Half of the participants were given written versions of instructions, while the other half of the participants only listened.

The results (Fig. 3) replicated the findings from Study 1: Plain English jury instructions show statistically higher comprehension rates than Current Instructions for both Listening-only [86% **PL** > 83% **CL**] and Reading+Listening [90% **PR** > 87% **CR**].

But most critically, results from Study 3 further revealed that reading while listening improved comprehension rates for both the Current versions [87% **CR** > 83% **CL**] and Plain English versions [90% **PR** > 86% **PL**] of jury instructions, supporting Hypothesis 3.

**Figure 3**  
 Listening (L) &  
 Reading (R)  
 Comprehension  
 rates for  
 Current (C)  
 vs.  
 Plain English (P)  
 Instructions

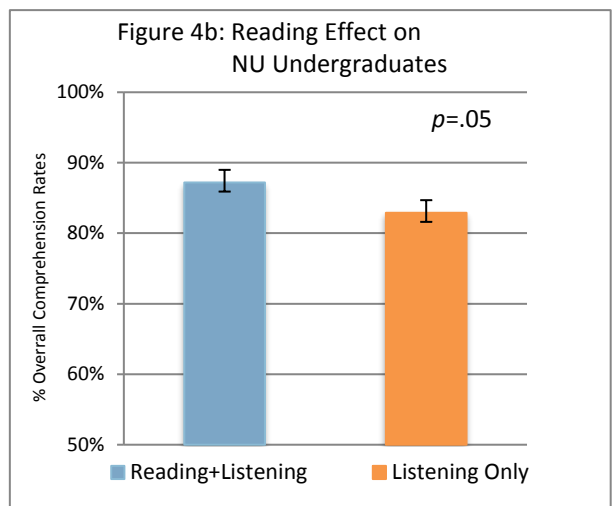
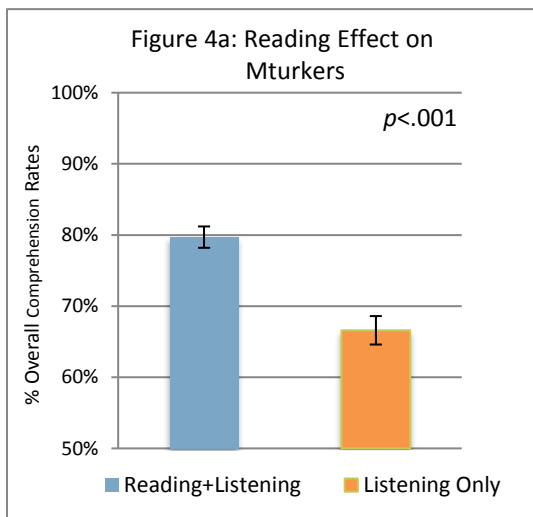


### Study 4: Expanding the Results to Mturkers to Match the Massachusetts Jury Pool

Though both Plain English version and reading aid improved comprehension rates, the improvements were relatively small, probably due to a ceiling effect of overall comprehension performance (over 80%). This may come from our subject pool, Northeastern University undergraduates, who are more highly educated than a typical jury: according to 2013 U.S. Census Bureau data, 42% of US residents over 18 have not gone beyond high school.

In order to address the possible gap between undergraduate students and the jurors, Study 4 applied the same materials and procedure to a more diverse population more similar to the jury pool, participants who accessed the study using Amazon MTurk. As in Study 3, half of the participants received written materials while listening to the six recordings of current jury instructions; the other half listened to the instructions without written materials.

The results from these new subjects matched our earlier findings: that reading along improves comprehension rates (as shown in Figure 4); in fact, the effect is stronger with these Mturk participants than with Northeastern undergraduates. As such, Study 4 provided stronger evidence supporting our hypotheses than our earlier studies.



## Conclusions

In summary, the present research demonstrated (1) that phrasing current instructions in Plain English improves comprehension; (2) linguistic factors (passive verbs and legalese terms) contribute to the comprehension difficulty of jury instructions; and (3) that supplying the text of jury instructions so that jurors can read while they listen improves comprehension.

Overall, our studies provide empirical support for reforming current jury instructions. Better-informed juries will reach more reliable and, ultimately, fairer verdicts when Massachusetts jury instructions are rewritten in Plain English, with passive verbs and legalese terms minimized, and when jurors can read the text as they listen to them.

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## Current

The **standard of proof** in a **civil case** is that a **plaintiff** must prove his or her case by a **preponderance of the evidence**. This is a less stringent standard than **is applied** in a **criminal**