

Legalese, **meet** linguistics

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LAW, MEET LINGUISTICS HOW JUST IS JUSTICE?



Photo by Mikhail Pavstvuk on Unsplash

Our Principal Investigator



Professor Janet
Randall
Linguistics,
Northeastern U.





Plain English Jury Instruction Task Force

- *Failure of recollection is common.
Innocent misrecollection is not uncommon.*
- *People often forget things or make mistakes
in what they remember.*

California Book of Approved Jury Instructions (BAJI), 2.21.

Judicial Council of California Civil Jury Instruction (CACI, 2003)

http://www.courts.ca.gov/partners/documents/caci_2012_edtion.pdf

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LAW, MEET LINGUISTICS HOW JUST IS JUSTICE?

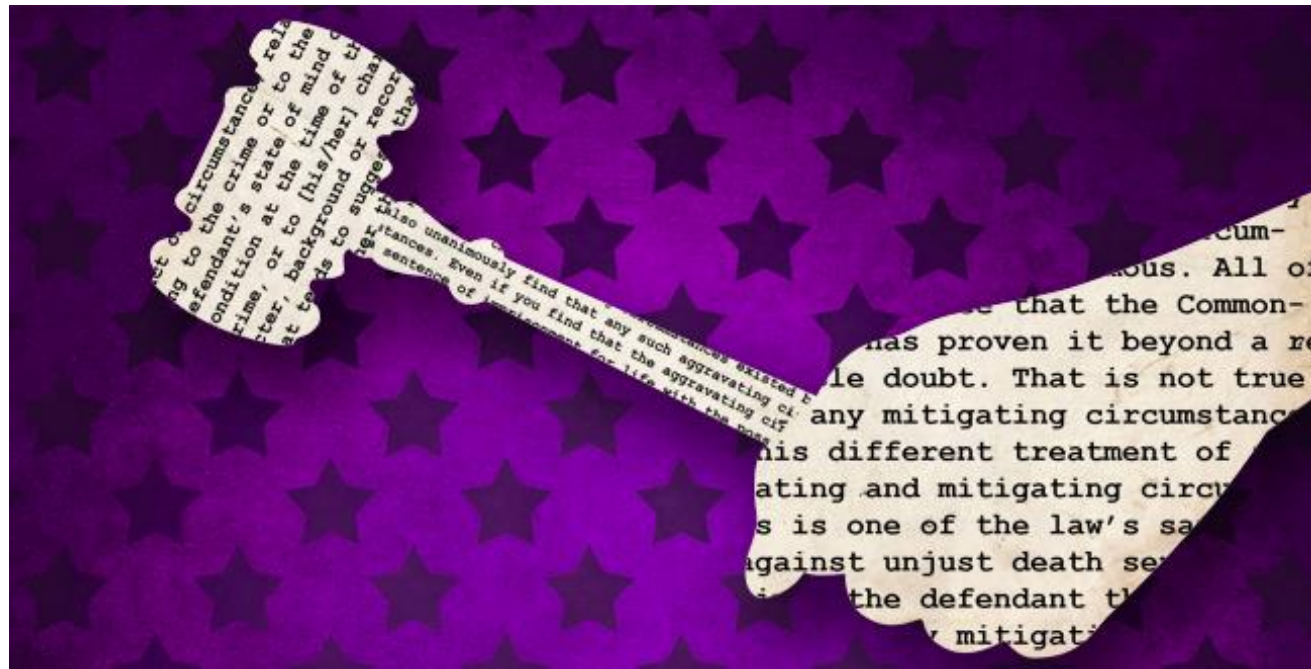


Photo by Mikhail Pavstvak on Unsplash

Today's Roadmap

- Jury instructions: some background
- A study: Which linguistic factors matter?
- More studies from the Linguistics & Law lab
- Our newest study
- Take-aways & next steps

Jury instructions: some background



Diamond (2005)

Marder (2006)

Tiersma (2006)

Shuy (2007)

Tiersma (2009)

Dumas (2012)

Diamond, Murphy & Rose (2012)

Randall & Graf (2014)

Broda-Bahm (2015)

L. Cheng, W. Cheng, & J. Li (2015)

Randall (2015)

Pollack (2017)

Broda-Bahm (2018)

...

In one study of jurors who had served on a trial:

Tiersma (1993)

more than 25% couldn't define

admissible evidence
impeach
burden of proof
inference

more than 50% thought that

a preponderance of the evidence

meant either

“a slow, careful, pondering of the evidence”

or

“looking at the exhibits in the jury room”

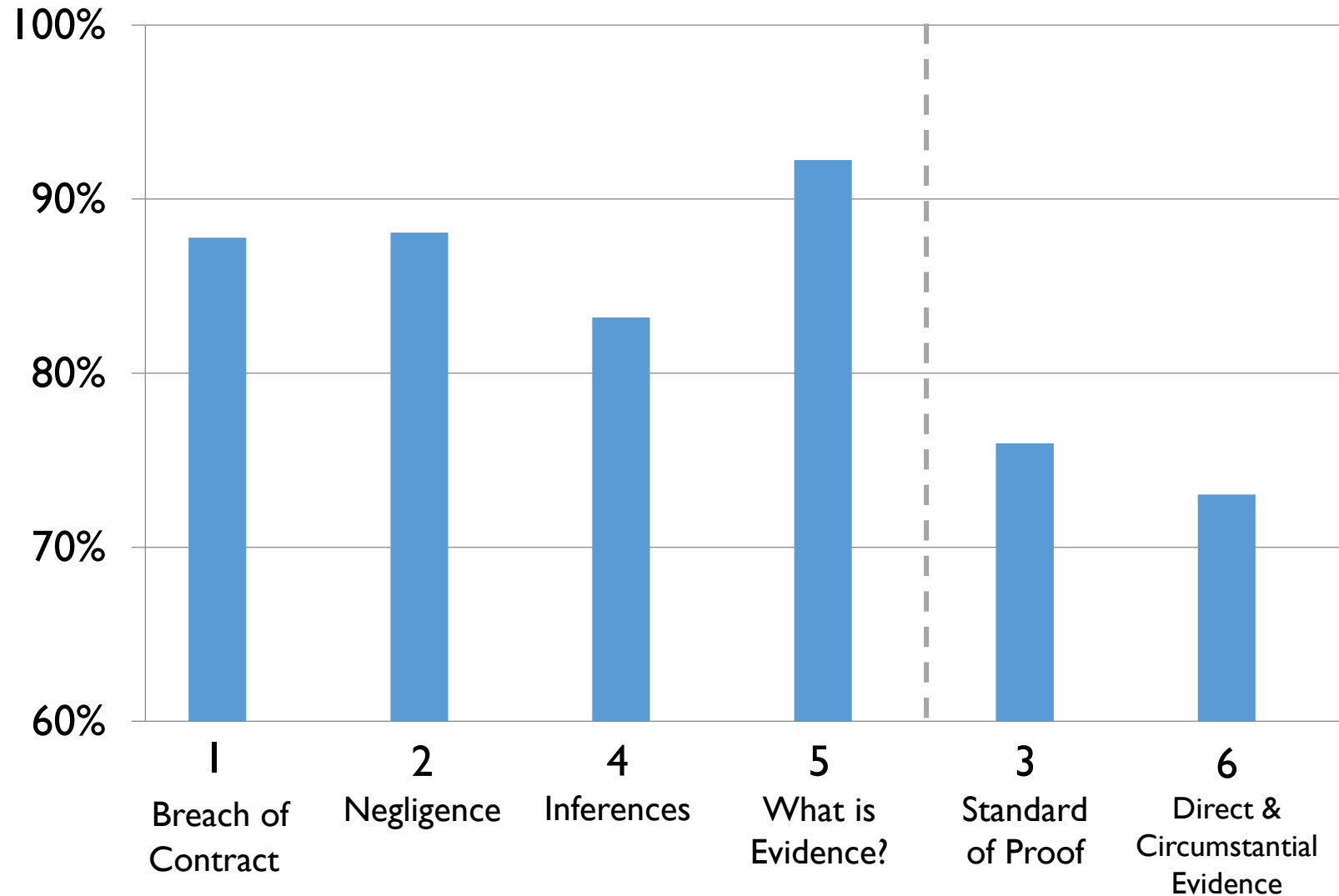
Barriers to revising jury instructions

- inertia
- jury instructions are “sacred texts”
- jury instructions should inspire awe & respect for the court
- the empirical studies were wrong
- revising the instructions won't get jurors to listen anyway
- past decisions will be challenged
- **there's really no problem with them**

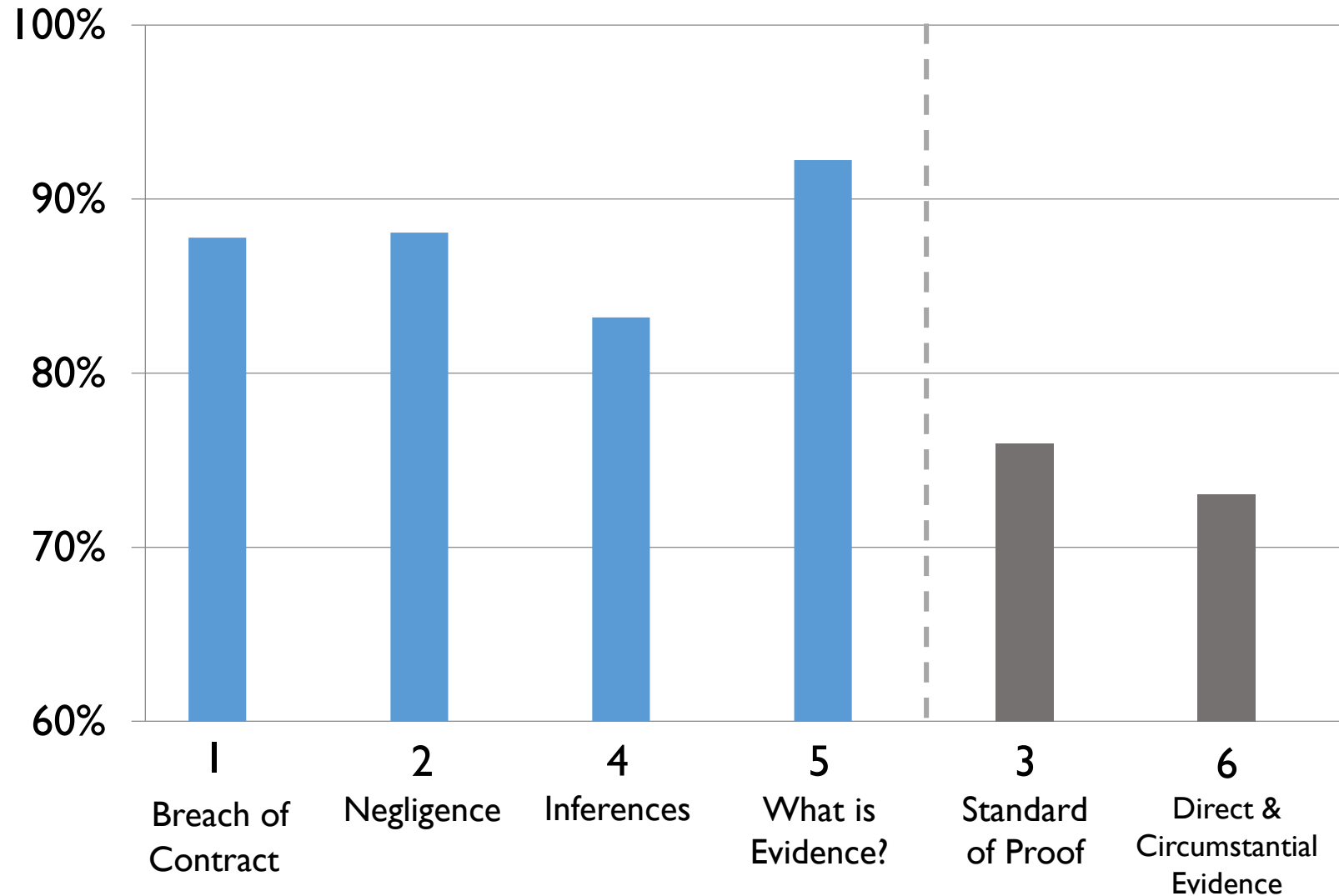
Standard of Proof



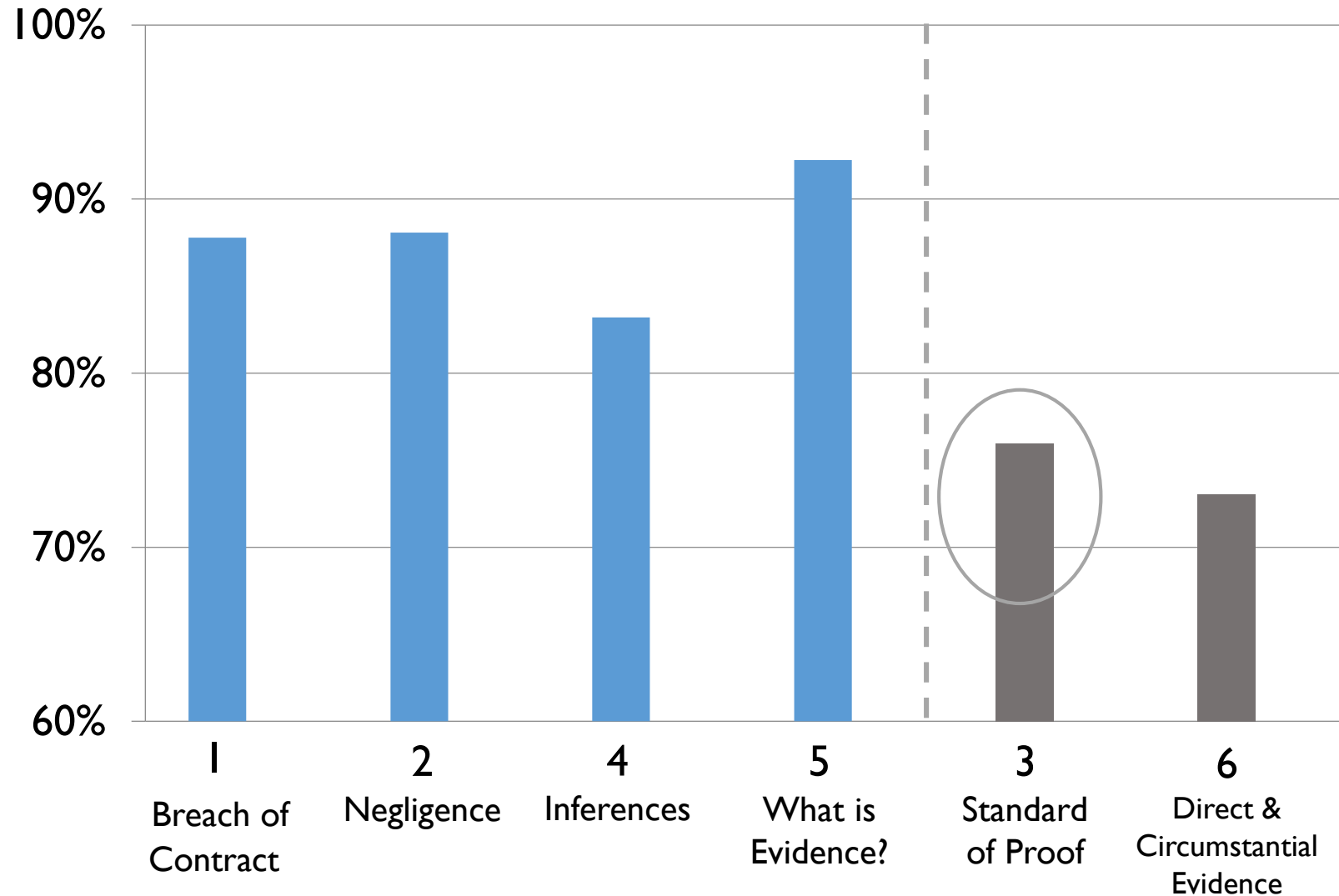
Comprehension Rates: NU students



Comprehension Rates: NU students



Comprehension Rates: NU students



A study:
Which
linguistic factors
matter?



Standard of Proof

The standard of proof in **a civil case** is that **a plaintiff** must prove (his/her) case by **a preponderance of the evidence**. This is a less stringent standard than **is applied** in **a criminal case**, where **the prosecution** must prove its case **beyond a reasonable doubt**.

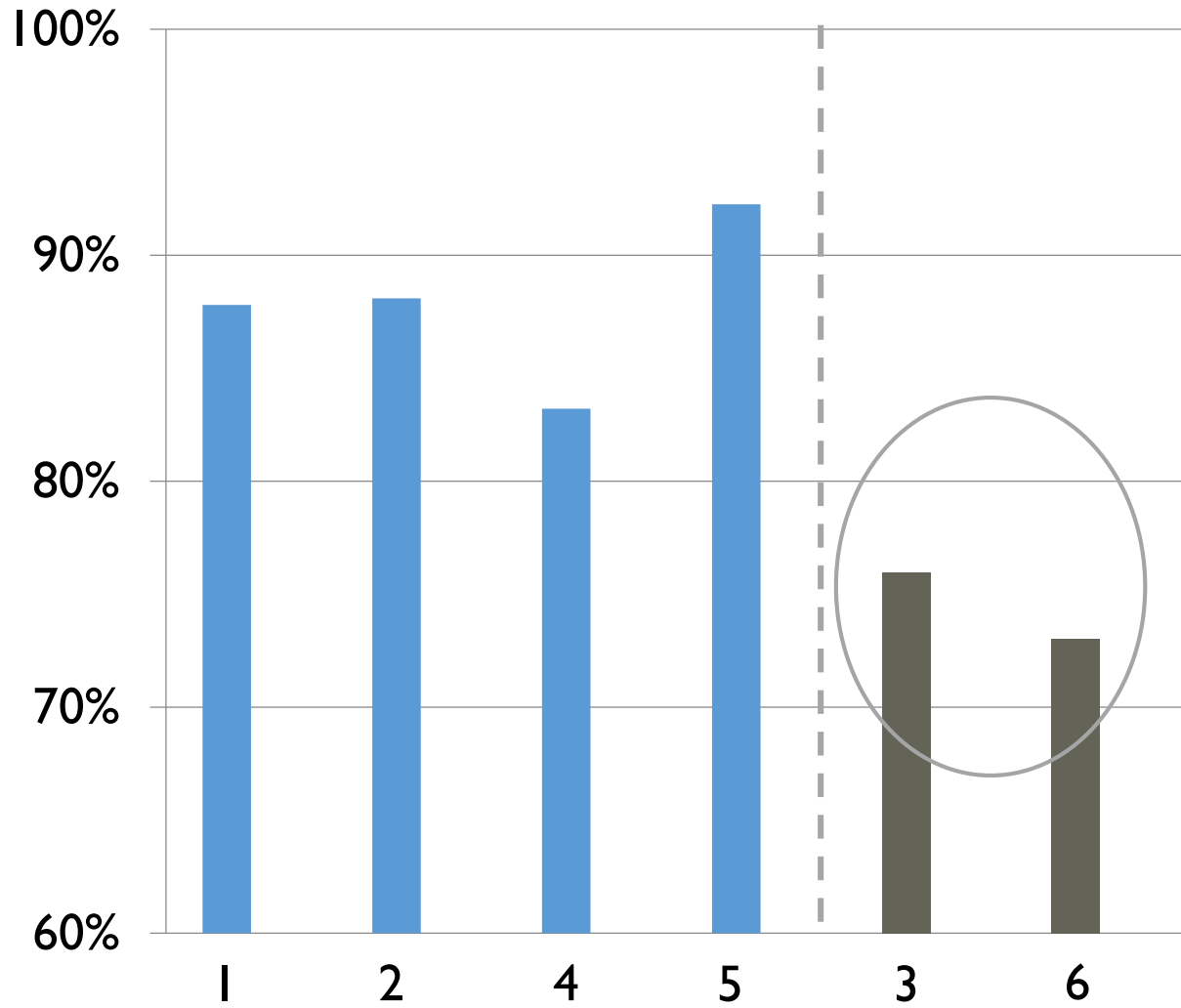
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The standard of **a preponderance of the** means the greater weight of the evidence. **A preponderance of the evidence** is **such evidence** which, when **considered** and **compared** with any opposed to it, has more convincing force and produces in your minds a belief that what **is sought to be proved** is more probably **true than not true**.

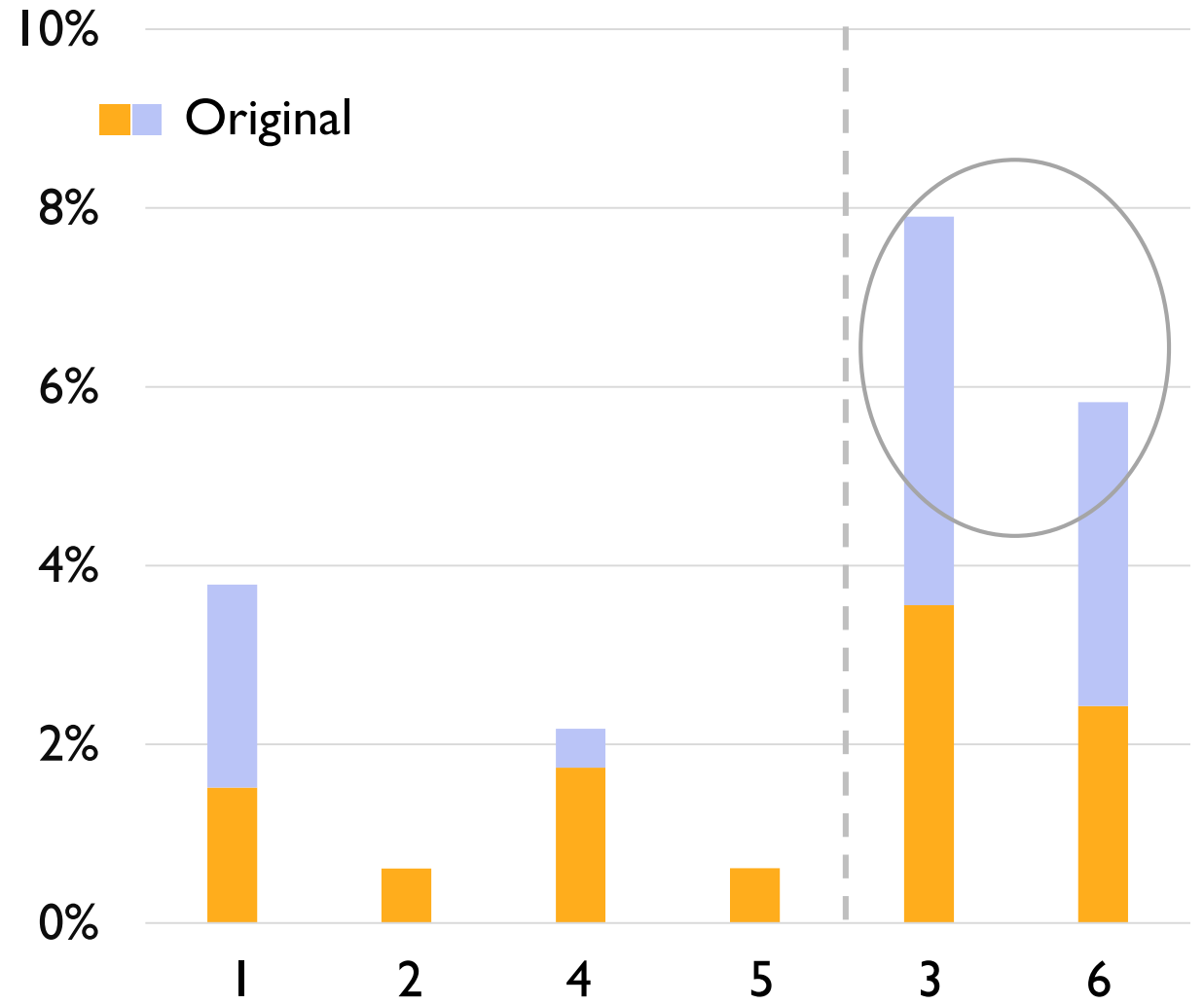
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Simply stated, a matter **has been proved** by a **preponderance of the evidence** if you determine, after you have weighed all of the evidence, that that matter is more probably true than not true.

Comprehension Rates: NU students



Rates of **Passive verbs** & **Legalese**



Standard of Proof

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Standard of Proof

Syntax

- Negatives
- Nominals
- Multiple embeddings
- Interjected phrases
- **Passives**

Ferreira (2003)

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Passives

Active: **[The jury]** must consider **[all of the evidence]**.

Passive: **[All of the evidence]** must **be considered**
by [the jury].

Standard of Proof

Legalese

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Standard of Proof

Legalese

- **Low-frequency words**
*stringent, such evidence,
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- **Legal terms, not defined**
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party, bearing, burden, meets*

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Syntax

- **Passives**

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Plain English

This is a civil case. In a civil case, there are two parties, the “plaintiff”, and the “defendant”. The plaintiff is the one who brings the case against the defendant. And it is the plaintiff who must convince you of his case with stronger, more believable evidence. In other words, it is the plaintiff who bears the “burden of proof”.

After you hear all the evidence on both sides, if you find that the greater weight of the evidence -- also **called** "the preponderance of the evidence" -- is on the plaintiff's side, then you should decide in favor of the plaintiff.

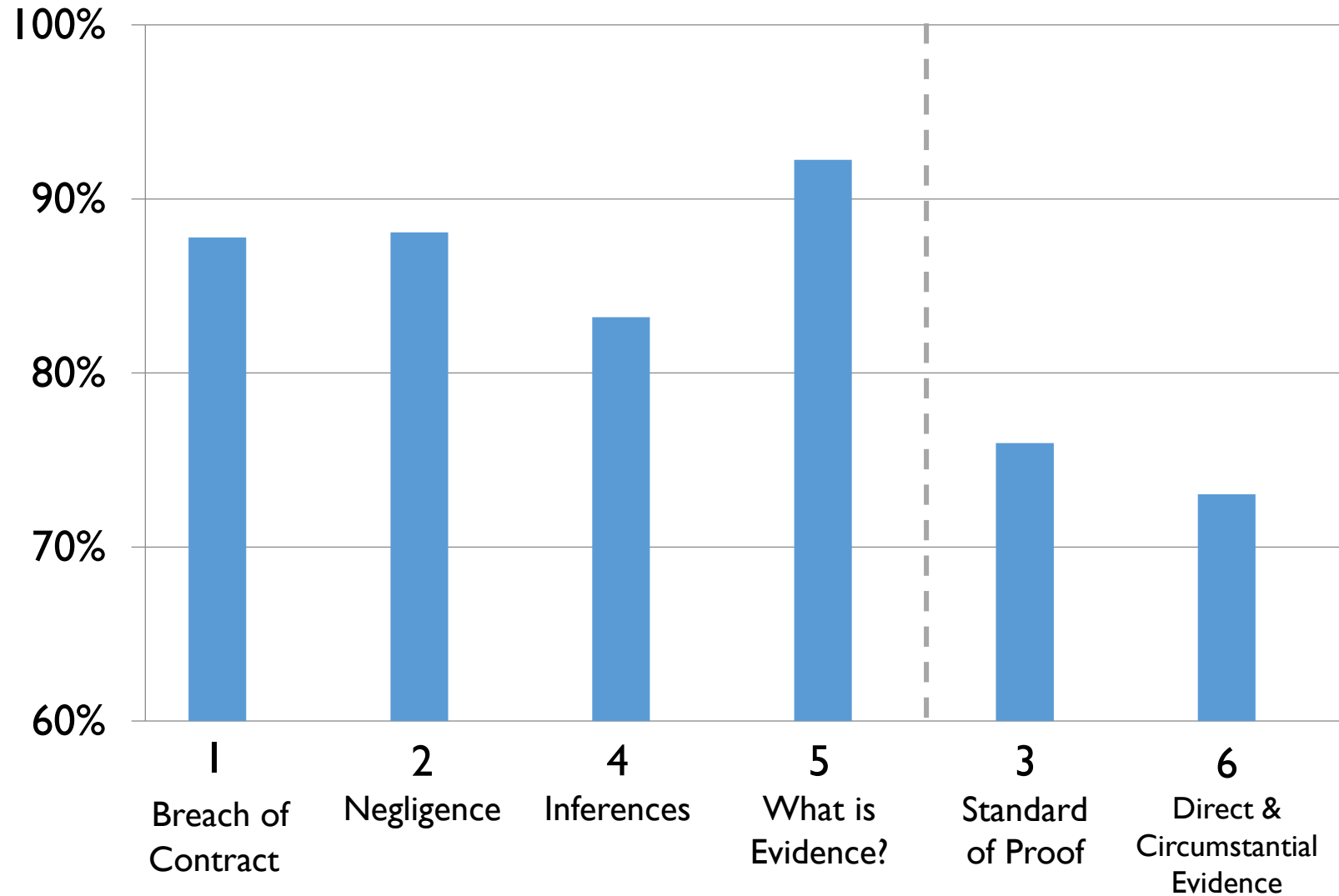
But if you find that the evidence is stronger on the defendant's side, or the evidence on the two sides is equal, 50/50, then you must decide in favor of the defendant.

Now, you may have heard that in some cases, the evidence must convince you “beyond a reasonable doubt”. That’s only true for criminal cases.

For civil cases like this one, you might still have some doubts after hearing the evidence, but even if you do, as long as one side's evidence is stronger -- even slightly stronger -- than the other's, you must decide in favor of that side.

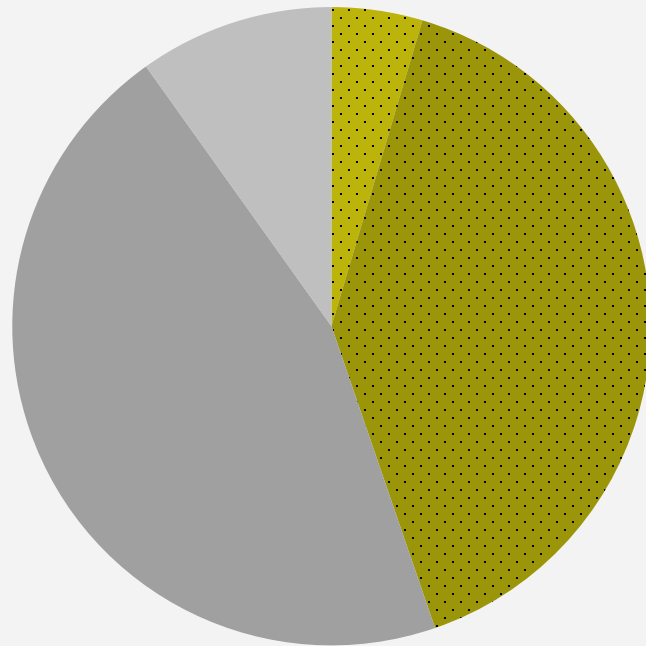
Stronger evidence does not mean more evidence. It is the quality or strength of the evidence, not the quantity or amount, that matters.

Comprehension Rates: NU students



Consider this:

Education Levels in Massachusetts




2013 U.S. Census Data

 K - 8th Grade

 High School

 College

 Graduate School

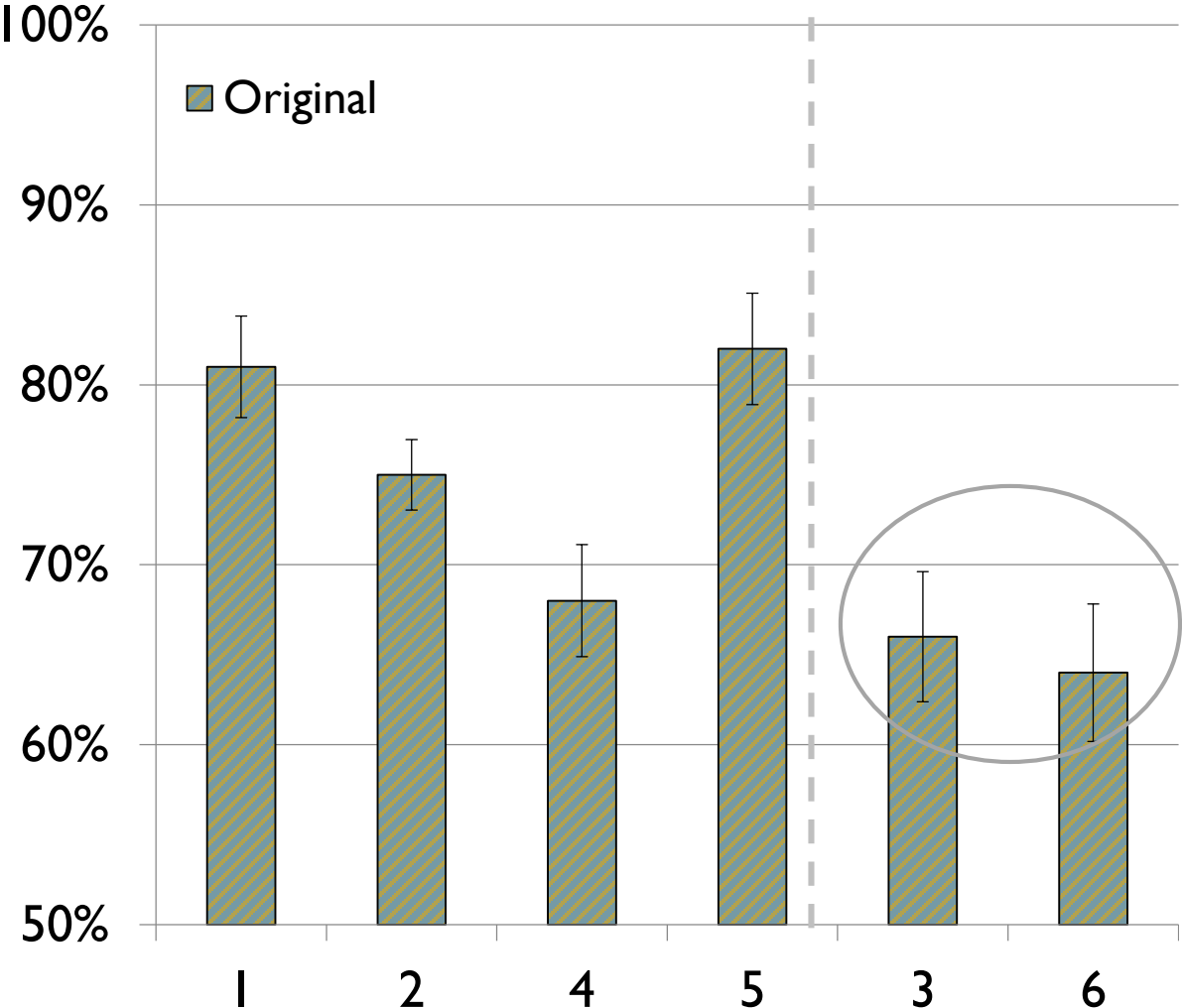
More studies from the Linguistics & Law Lab



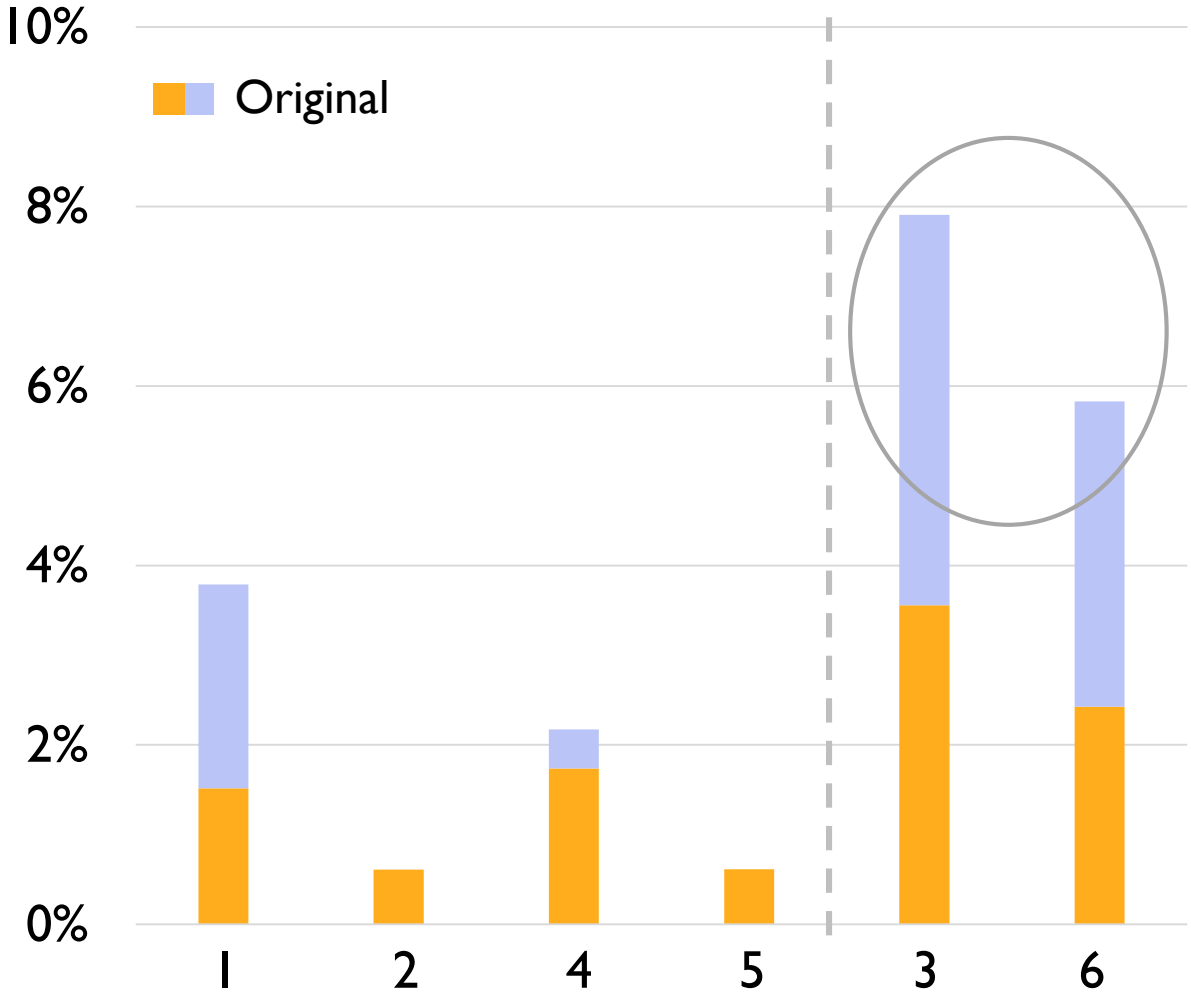
A new subject pool



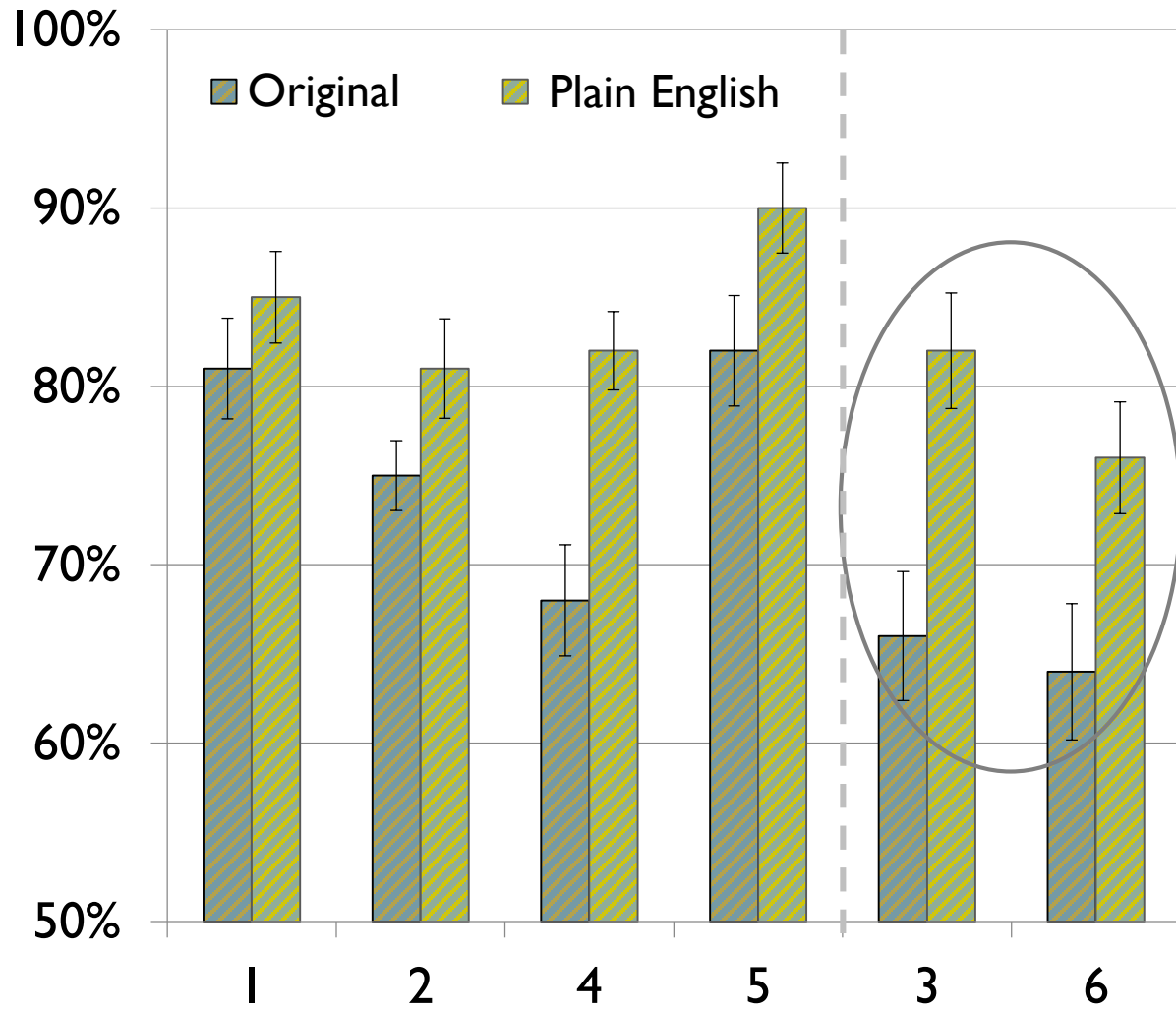
Comprehension Rates: MTurk Subjects



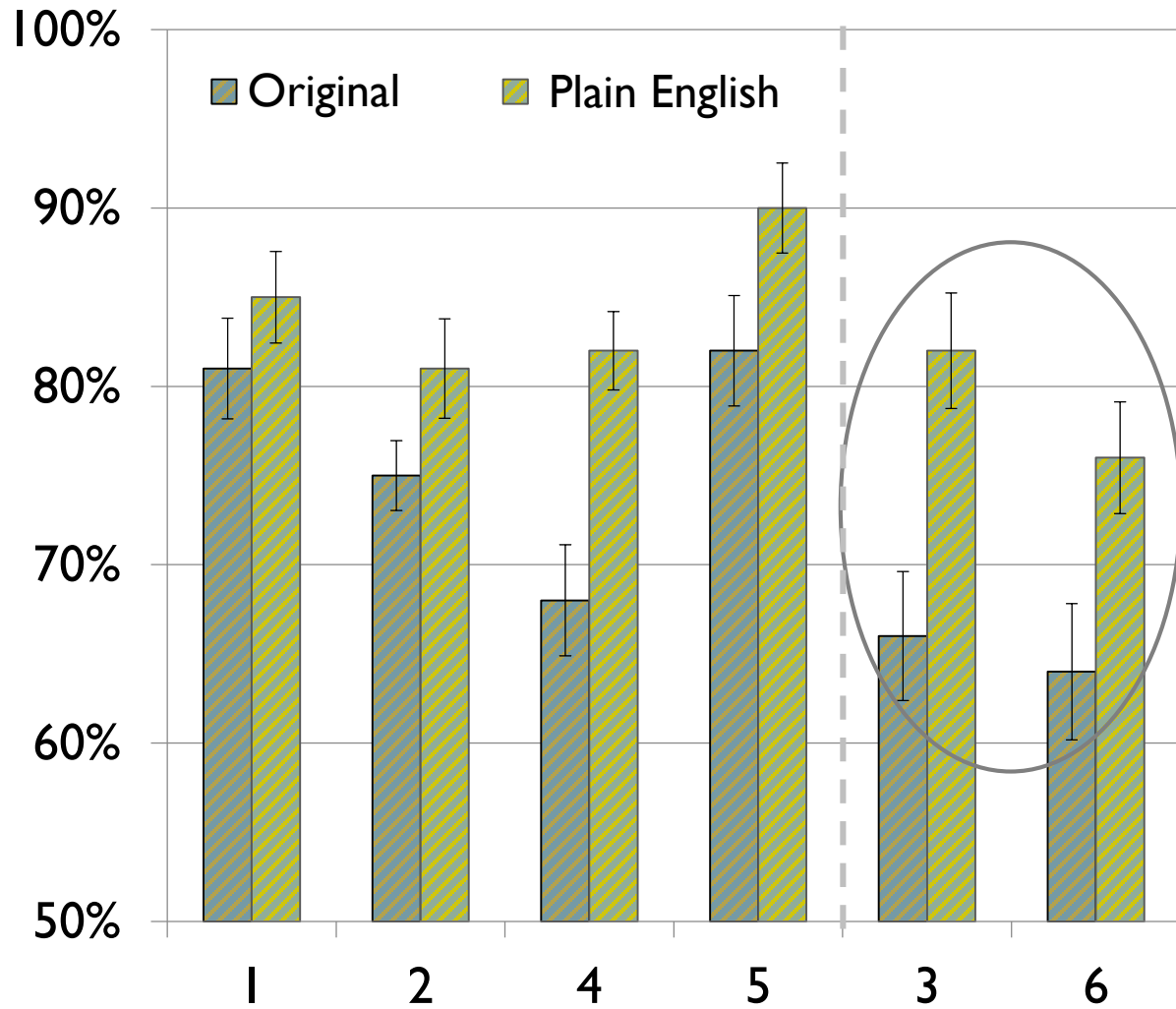
Rates of **Passive verbs** & **Legalese**



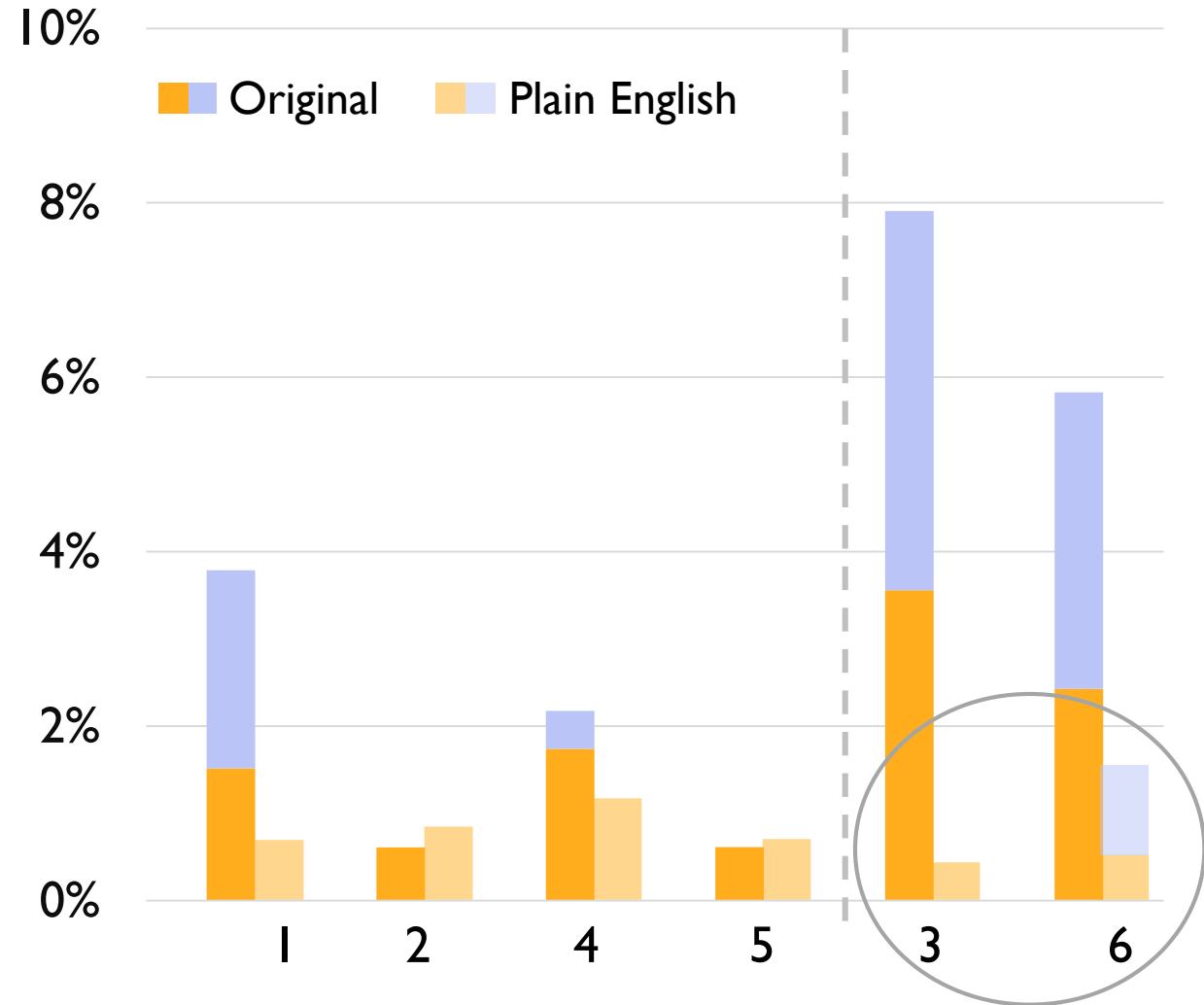
Comprehension Rates: MTurk Subjects



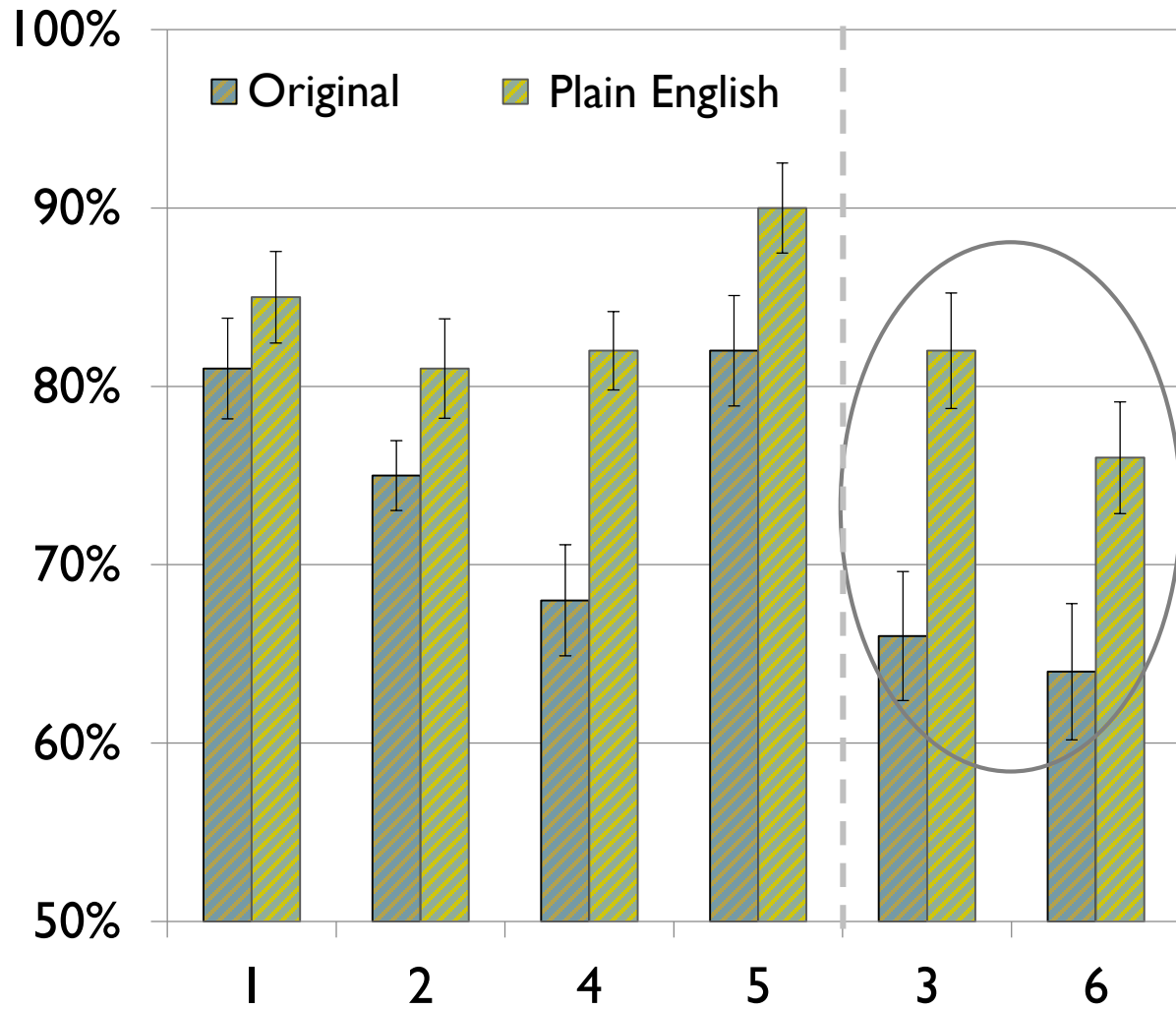
Comprehension Rates: MTurk Subjects



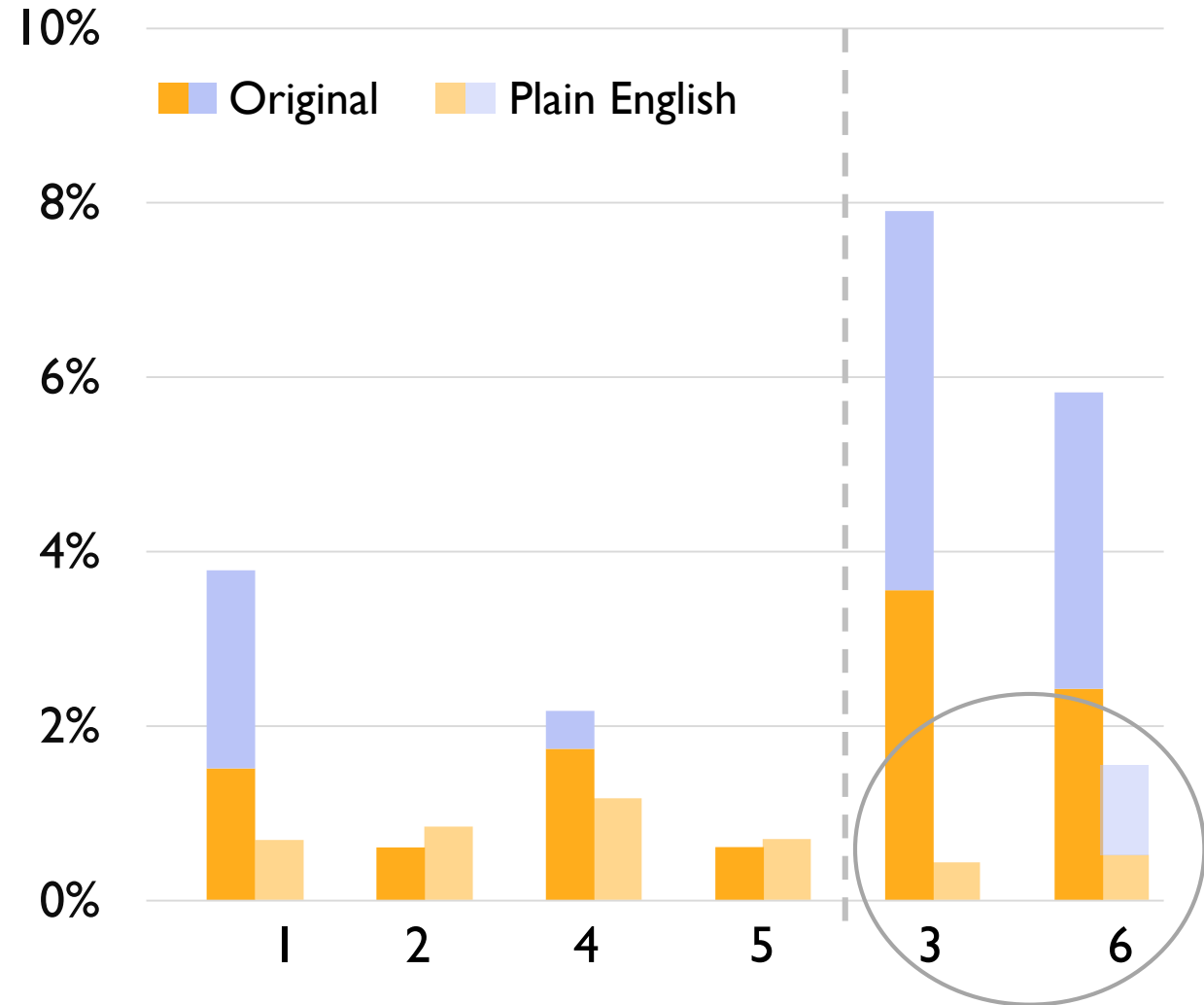
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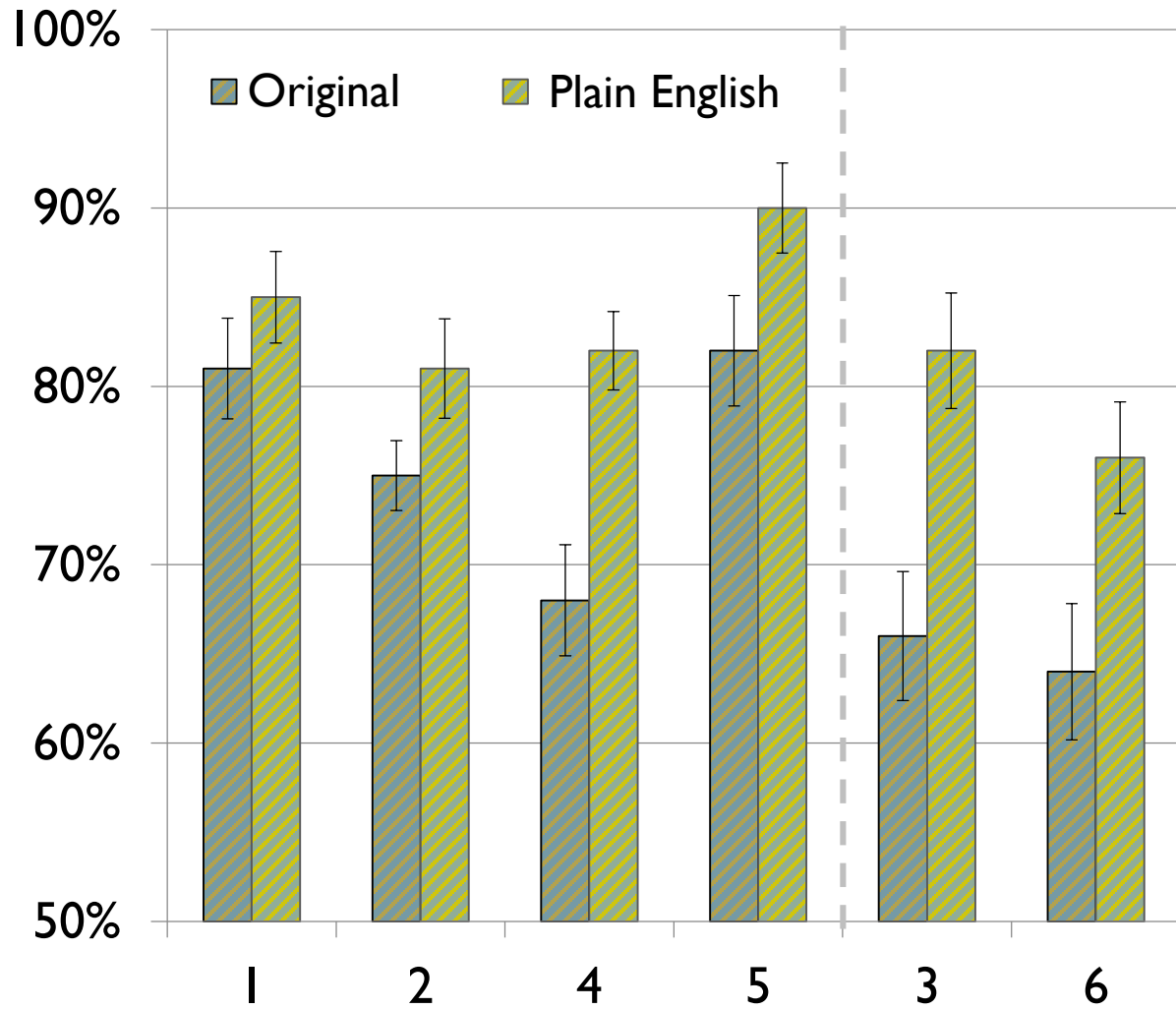
Comprehension Rates: MTurk Subjects







Rates of Passive verbs & Legalese



One more factor: Reading

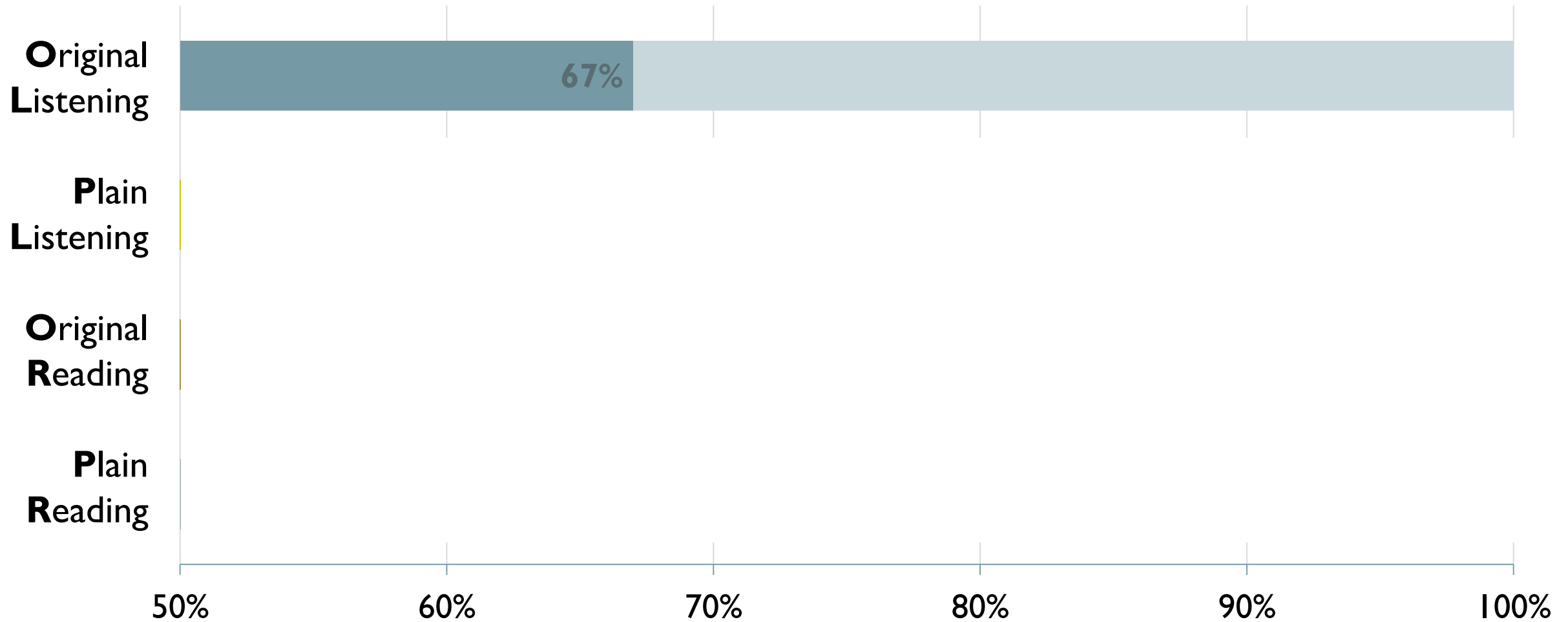


-  **Original** + **Listening**
-  **Plain English** + **Listening**
-  **Original** + **Reading**
-  **Plain English** + **Reading**

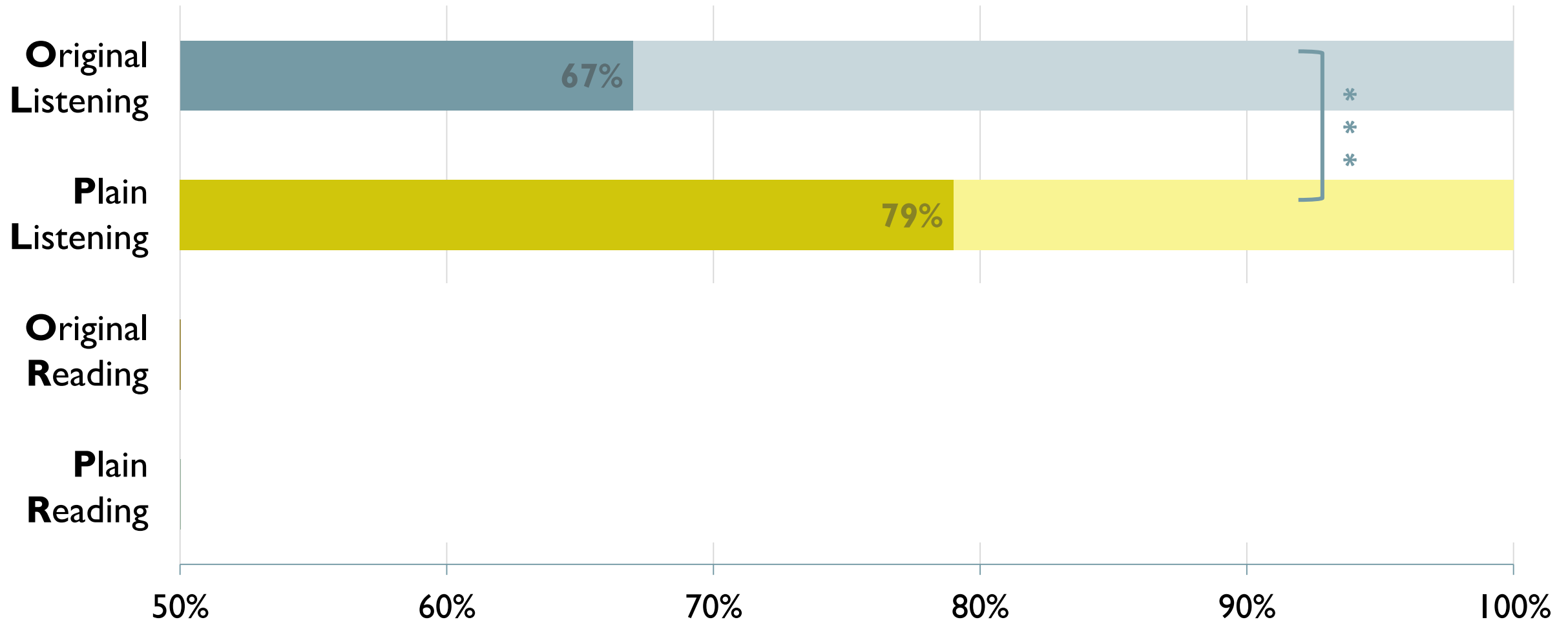
Method & Design

MTurk subjects n=389	O riginal	P lain English
L istening Only	125	99
Listening + R eading	66	99

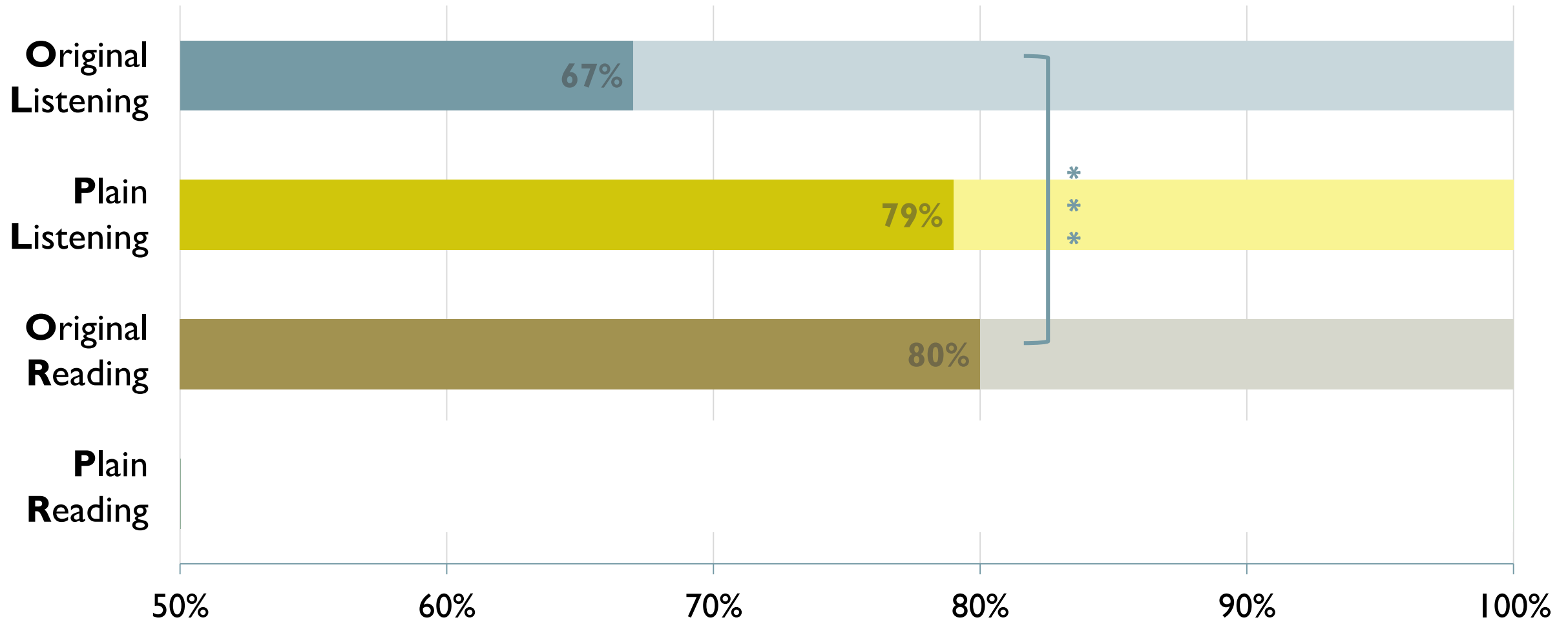
Two Factors: Plain English & Reading



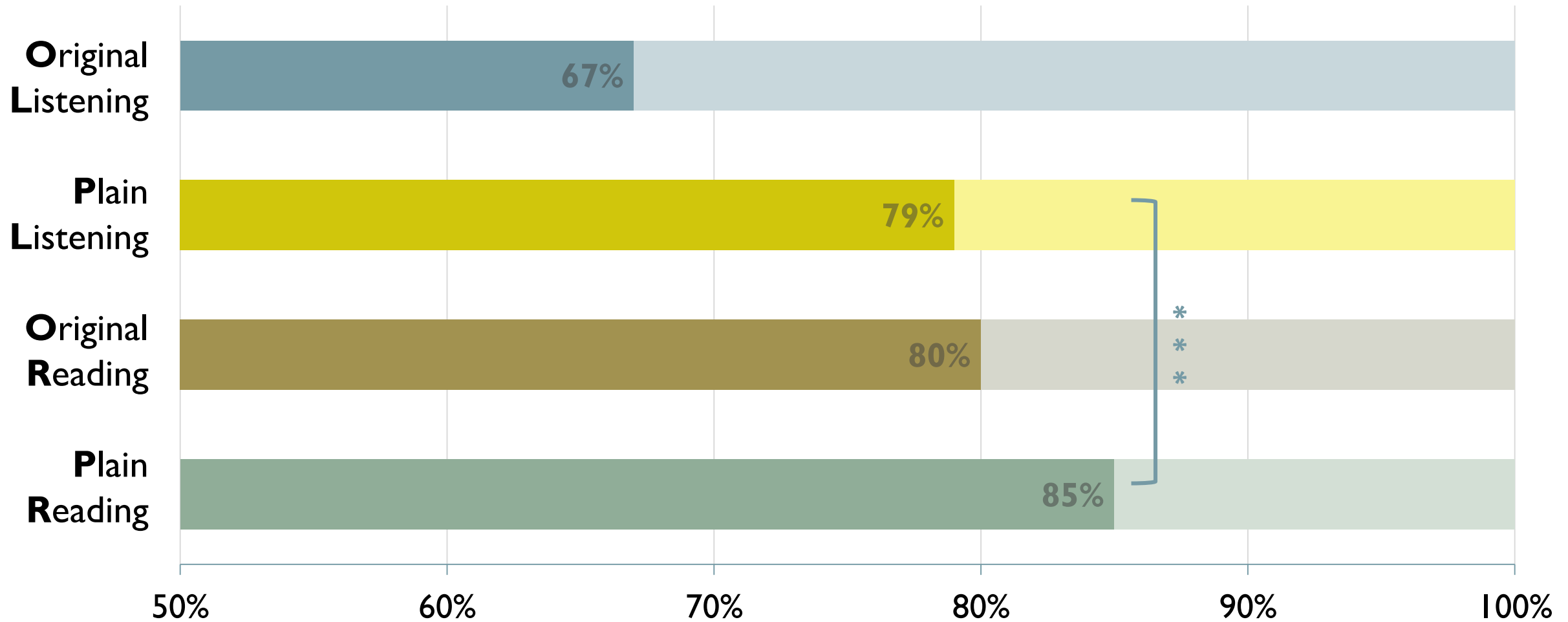
Two Factors: Plain English & Reading



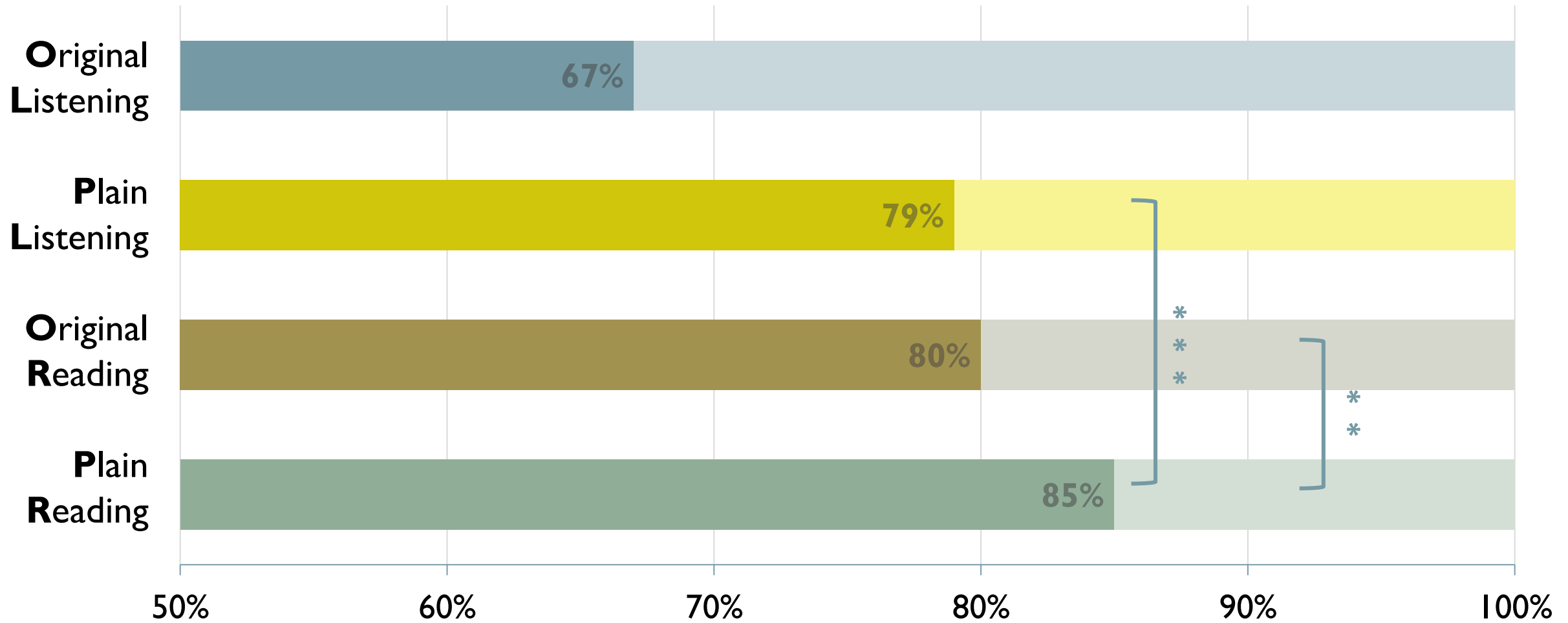
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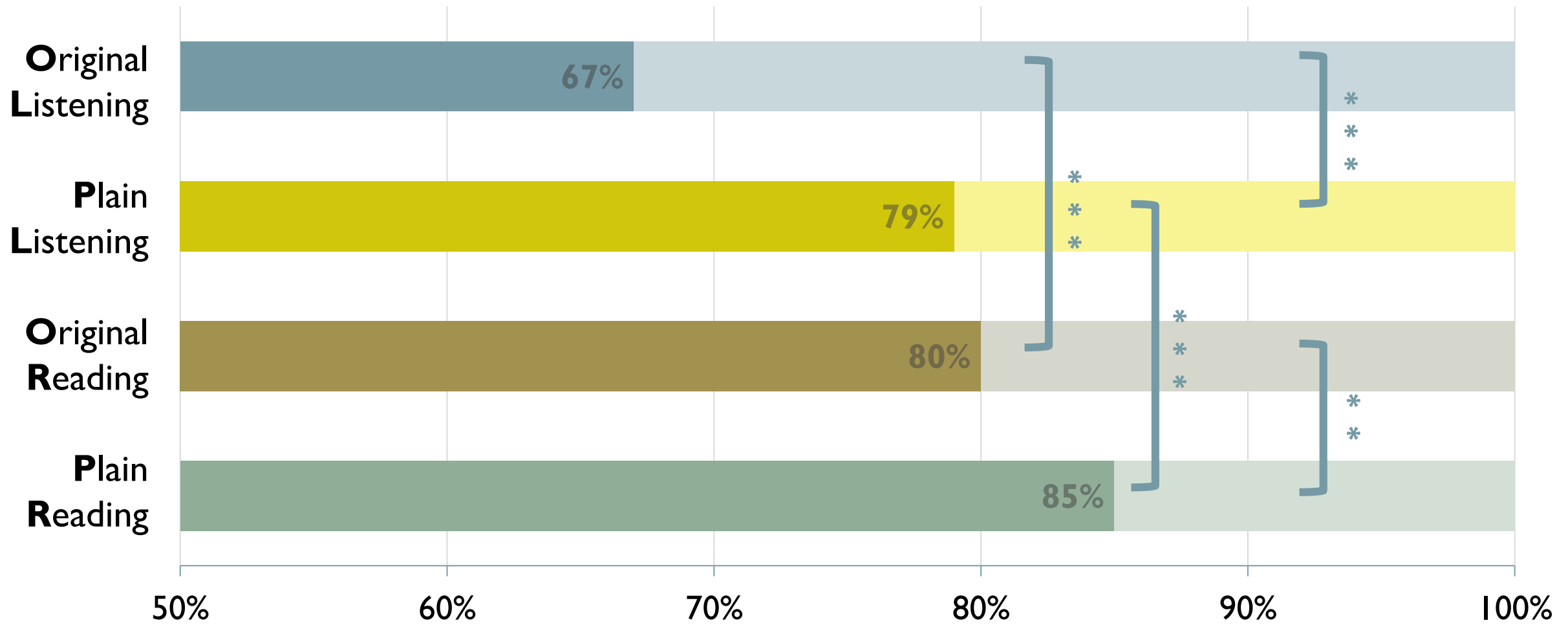
Two Factors: Plain English & Reading



Two Factors: Plain English & Reading



Two Factors: Plain English & Reading



Consider this:

Instruction 1

Questions

Instruction 2

Questions

Instruction 3

Questions

etc ...

Instruction 1

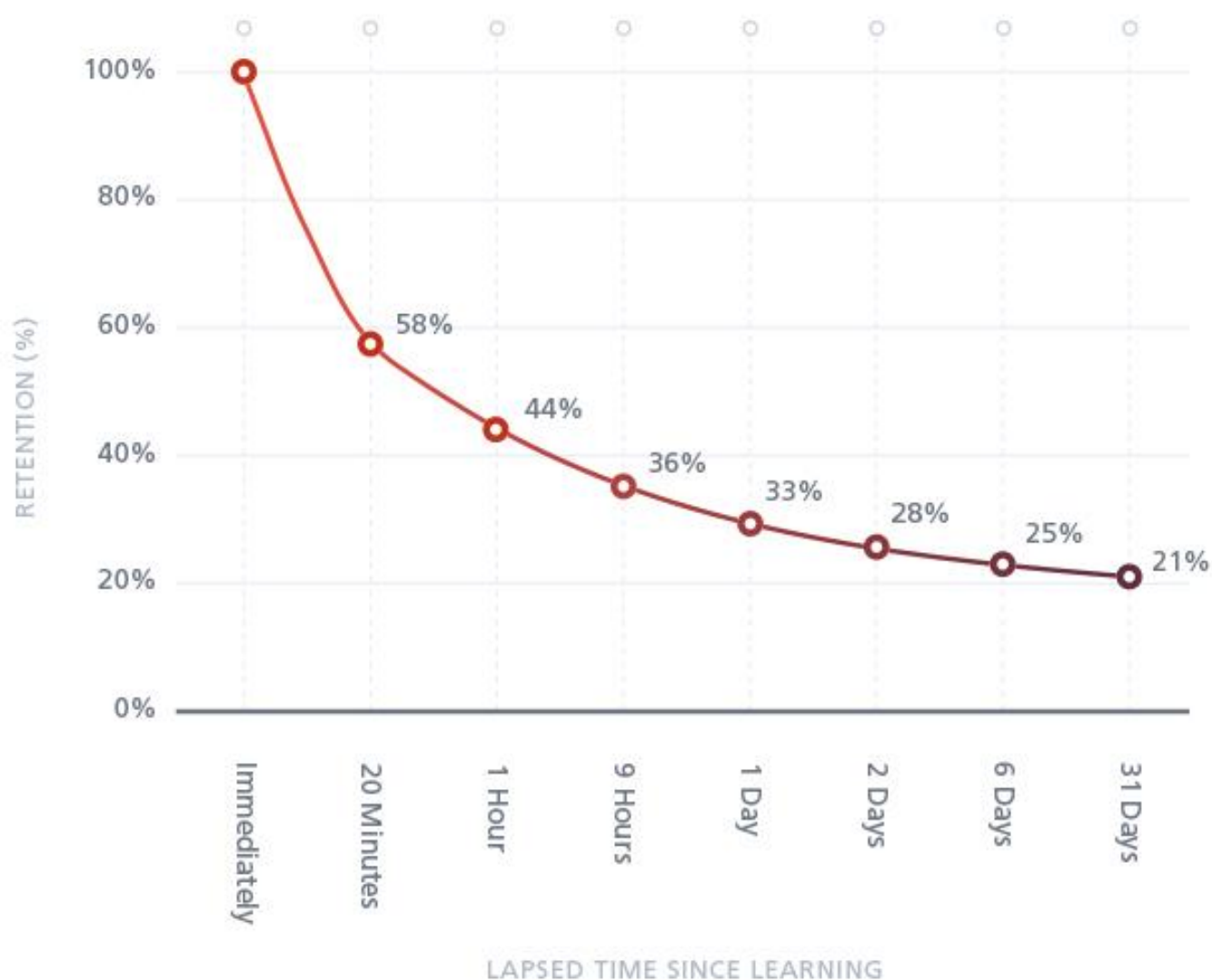
Instruction 2

Instruction 3

etc ...

Questions

The Ebbinghaus Forgetting Curve



- Retention declines over time
- Even within 20 minutes, retention is down to 58%.
- Prediction: presenting the instructions in a group, and asking questions about all of them at the end should lead to lower comprehension scores

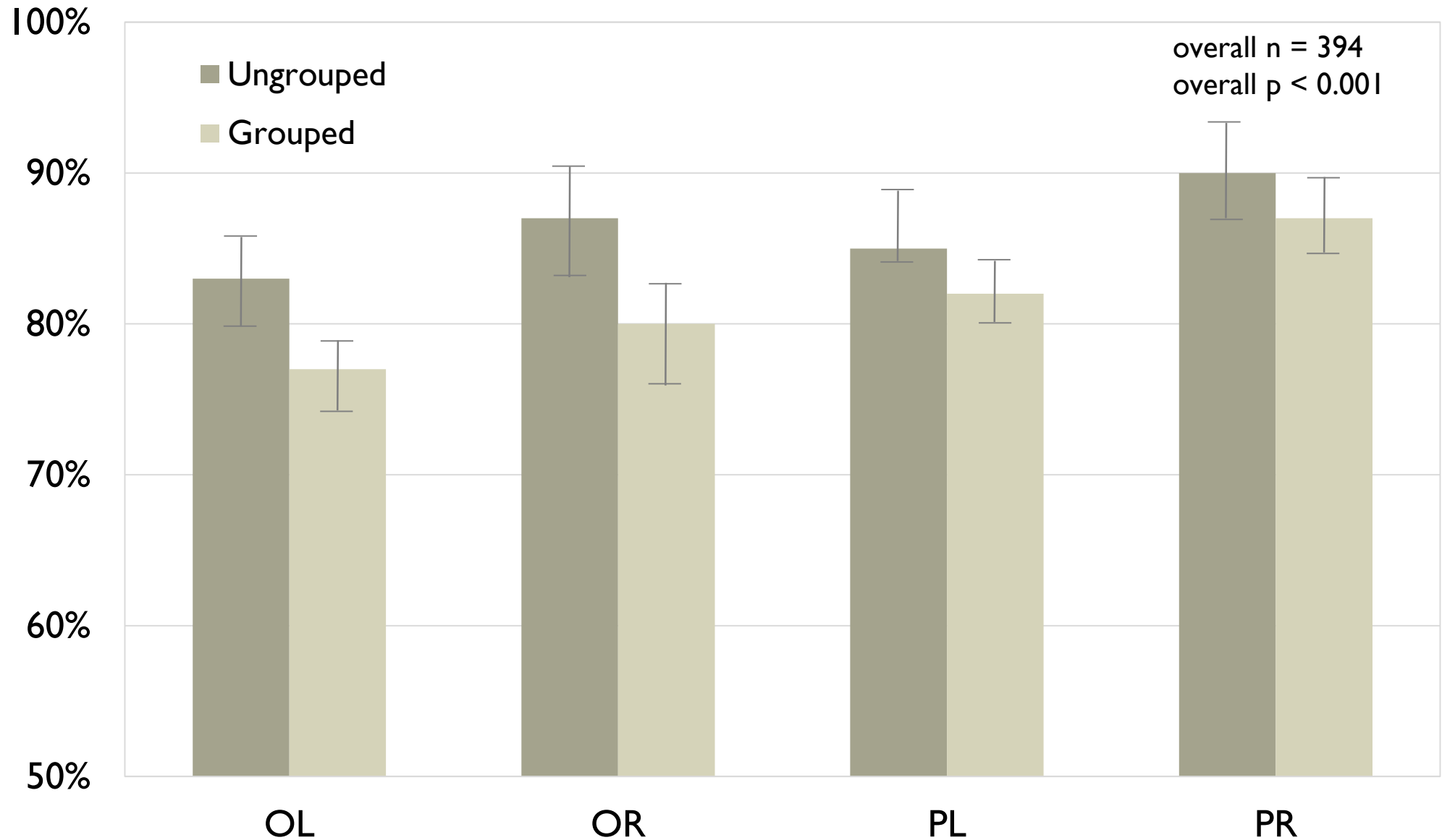
Ebbinghaus (1885)

Image from SwissVBS.com (2013), from Averell & Heathcote (2011)

Our newest study

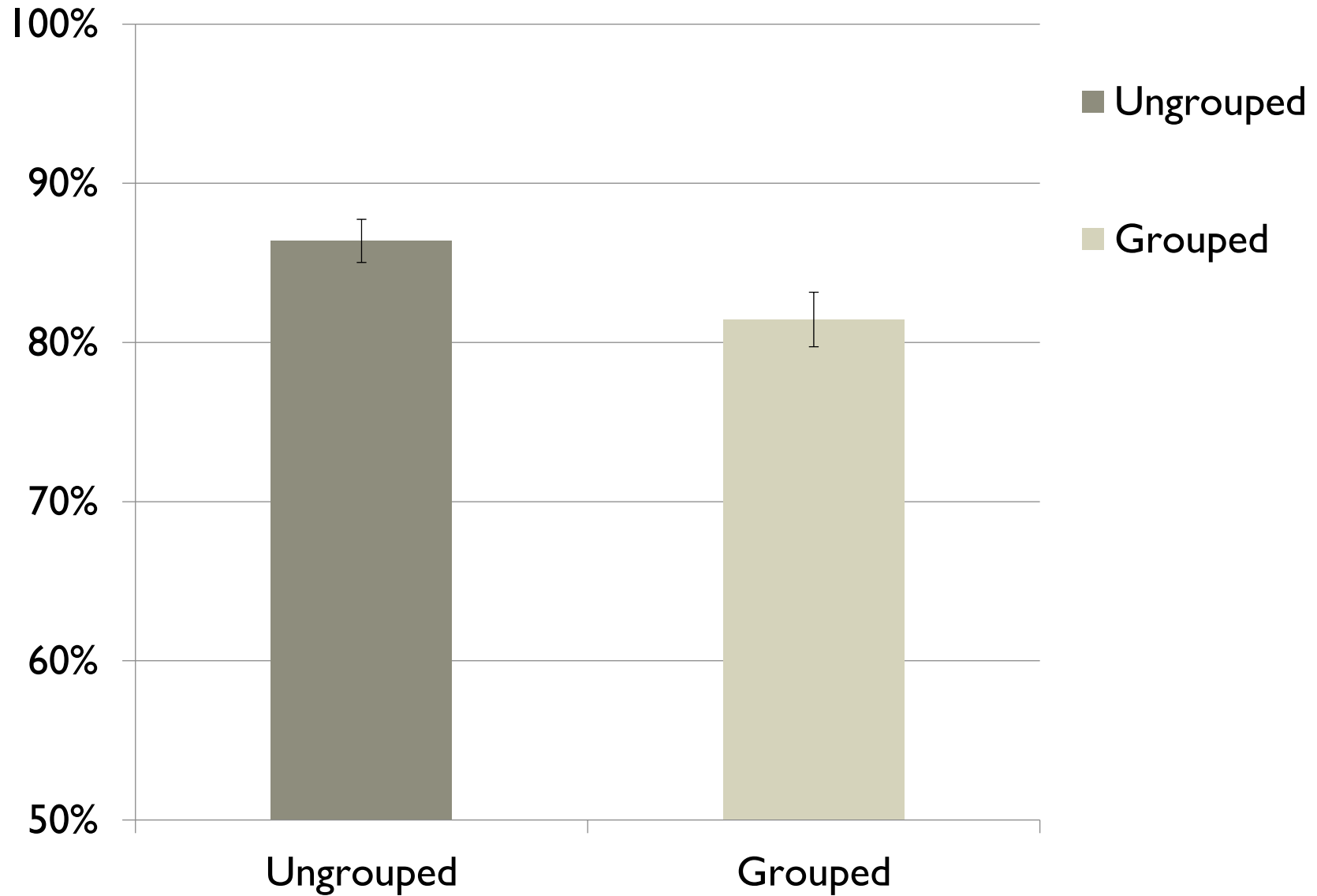


Ungrouped vs. Grouped Instructions - Students

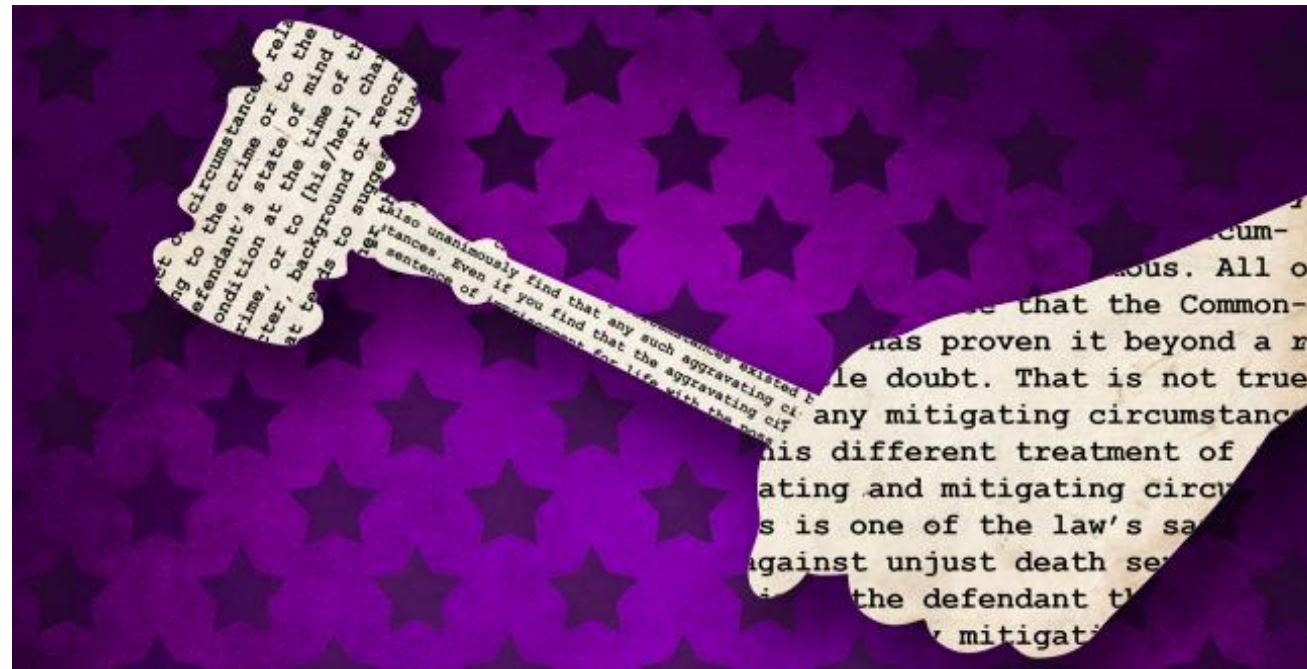


Ungrouped vs. Grouped

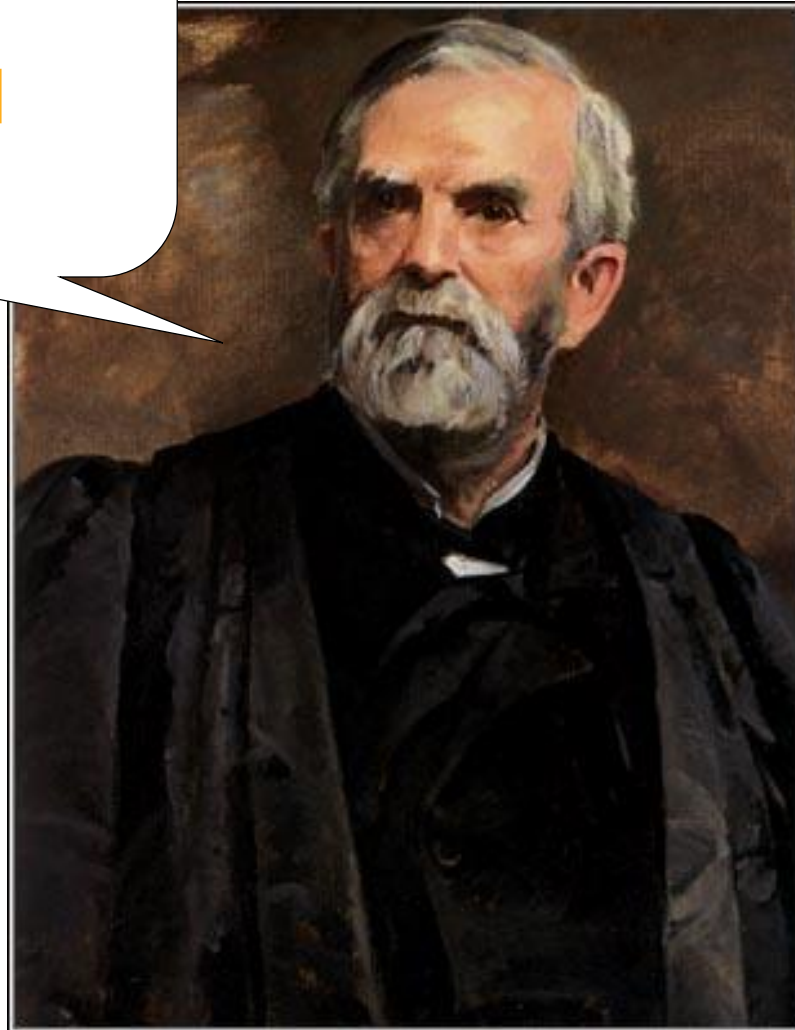
Overall Comprehension: students



Take-aways & next steps



All of the
evidence must
be considered
by the jury





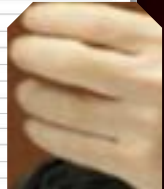
Direct & Circumstantial Evidence

There are two types of evidence that you may use to determine the facts of a case: direct evidence and circumstantial evidence.

You have direct evidence when a witness tells you directly about the fact that is to be proved, based on what he or she claims to have seen or heard or felt with his or her own senses, and the only question is whether you believe the witness.

You have circumstantial evidence when no witness can testify directly about the fact that is to be proved, but you are presented with evidence of other facts and then asked to draw reasonable inferences from them about the fact that is to be proved. There is no difference in probative value between direct and circumstantial evidence.

Let me give you an example. Your daughter might tell you one morning that she saw the defendant at your window. That is direct evidence that the defendant has been to your house. On the other hand, she might tell you only that she saw mail in the mailbox. That is circumstantial evidence that the defendant has been there; no one has seen him, but you can reasonably infer that he has been there because there is mail in the box.



The **moral** of the story:

wherever there is **legal language**

aimed at an audience of **non-experts**, like jurors

look at the language from a **linguistic** point of view.

The End

Thank you.



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References

- Abbott, Walter F. & John Batt (1999) *Handbook of Jury Research* American Law Institute. California Civil Jury Instructions Retrieved online on December 31 2012 via <http://www.courts.ca.gov/partners/juryinstructions.htm>
- Averell, L. & Heathcote, A. (2011). The Form of the Forgetting Curve and the Fate of Memories, *Journal of Mathematical Psychology* 55, No. 1, 25–35.
- Benson, R.W. (1984). The end of legalese: The game is over. *Review of Law and Social Change* 13 (3), 519-573.
- Brady, P. F., J. D. Lipchitz, & S. D. Anderson, eds. (2008). *Massachusetts Superior Court Civil Practice Jury Instructions*. Boston: MCLE.
- Broda-Bahm, Ken. (March 23, 2015) “Embrace Plain English Jury Instructions.” *The Persuasive Litigator*. Accessed June 7, 2018 via <https://www.persuasivelitigator.com/2015/03/embrace-plain-english-instructions-and-plain-english-persuasion.html>
- Broda-Bahm, Ken. (January 11, 2018) “Let the Judge Teach (and Not Just Recite) the Instructions” *The Persuasive Litigator*. Accessed June 7, 2018 via <https://www.persuasivelitigator.com/2018/01/let-the-judge-teach-and-not-just-recite-the-instructions.html>
- Brown, D. (2000) Regulating decision effects of legally sufficient jury instructions. *Southern California Law Review* 73(5): 1105–1131. <http://dx.doi.org/10.2139/ssrn.246498>
- Chang, Anna C. (2009) *Gains to L2 listeners from reading while listening vs. listening only in comprehending short stories*. Applied English Department, Hsing-Wu College.
- Charrow, Robert P. & Veda R. Charrow (1979) *Making Legal Language Understandable: A Psycholinguistic Study of Jury Instructions*. *Columbia Law Review* 79, 1306-1374.
- Cheng, L., Cheng, W., & Li, J. (2015). Jury instructions in Hong Kong: a Gricean perspective. *International Journal of Speech, Language & the Law*, 22(1).

References

- Diamond, Shari, B. Murphy & M.R. Rose (2012) The “Kettleful of Law” in Real Jury Deliberations: Success, Failures and Next Steps, *Northwestern Law Review* vol. 106, no. 4. 1573-1608.
- Diamond, Shari (2003) "Truth, Justice and the Jury, *Harvard Journal of Law & Public Policy* 26, 143-155.
- Diamond, Shari & Judith Levi (1996) Improving Decisions on Death by Revising and Testing Jury Instructions, *Judicature*, 79, 224 -231.
- Diana, R.A. & L.M. Reder (2006) The Low-Frequency Encoding Disadvantage: Word Frequency Affects Processing Demands. *Journal of Experimental Psychology: Learning, Memory & Cognition* 32, 805–815.
- DuBay, W. H. (2004) The principles of readability. Costa Mesa, CA: Impact Information. Retrieved online on December 31 2012 via <http://www.nald.ca/library/research/readab/readab.pdf>
- Duffelmeyer, F.A. (1979). The effect of rewriting prose material on reading comprehension, *Reading World*, 19(1), 1–16.
- Dumas, B.K. (2000) Jury trials: lay jurors, pattern jury instructions, and comprehension issues. *The Tennessee Law Review* 67: 701—742.
- Dumas, B (2006) Jury Instructions in Brown, K. (ed.), *Encyclopedia of Language & Linguistics* (Second Edition), Elsevier Pergamon, Oxford, 143-148.
- Dumas, B. K. (2012) Improving the comprehensibility of US pattern jury instructions. In Proceedings of The International Association of Forensic Linguists’ Tenth Biennial Conference. 49-57.
- Ebbinghaus, H. (1885). Memory: A contribution to experimental psychology. *Annals of neurosciences*, 20(4), 155. Translated by Ruger, H.A. & Bussenius, C. E. (1913). Originally published by Teachers College, Columbia University New York.
- Educational Attainment of the Population 18 Years and Over, by Age, Sex, Race, and Hispanic Origin: 2013, All Races. U.S. Census Bureau, Current Population Survey, 2013 Annual Social and Economic Supplement. Accessed electronically on March 21, 2014. <https://www.census.gov/hhes/socdemo/education/data/cps/2013/tables.html>

References

- Elwork, A. B. Sales & J. Alfini (1982) *Making Jury Instructions Understandable*. Charlottesville, VA: Michie.
- Ferreira, F. (2003) The misinterpretation of noncanonical sentences. *Cognitive Psychology* 47, 164–203.
- Gibbons, J. (2003) *Forensic Linguistics: An Introduction to Language in the Justice System*. Oxford: Blackwell.
- Gough, Philip B. (1966) "The verification of sentences: The effects of delay of evidence and sentence length." *Journal of Verbal Learning and Verbal Behavior* 5.5, 492-496.
- Just, M.A., & Carpenter, P.A. (1976) Eye fixations and cognitive processes. *Cognitive Psychology*, 8, 441–480.
- Just, M.A., & Clark, H. H. (1973) Drawing inferences from the presuppositions and implications of affirmative and negative sentences. *Journal of Verbal Learning and Verbal Behavior*, 12, 21–31.
- Kimble, J. (2001) How to mangle court rules and jury instructions. *The Scribes Journal of Legal Writing* 8: 39–52.
- Kincaid, J. P., R. P. Fishburne, R. L. Rogers, and B. S. Chissom (1975) Derivation of new readability formulas (Automated Readability Index, Fog Count and Flesch Reading Ease Formula) for Navy enlisted personnel. CNTECHTRA Research Branch Report 8-75.
- Klare, G. R. (1976) A second look at the validity of the readability formulas. *Journal of reading behavior* 8, 159-152.
- Levi, J. N. (1993) Evaluating jury comprehension of Illinois capital-sentencing instructions. *American Speech*, 68(1), 20-49.
- Marder, N.S. (2006) Bringing jury instructions into the twenty-first century, *Notre Dame Law Review* 81, 449-512.
- Marder, N.S. (2009) Answering jurors' questions: next steps in Illinois, *Loyola University of Chicago Law Journal*, 41, 727-752.
- Ng, E. (2016) Do They Understand? *Language and Law / Linguagem e Direito*, 3,2. 172-191.
- Olson, David R. & Nikola Filby. (1972): "On the comprehension of active and passive sentences." *Cognitive Psychology* 3.3 361-381.

References

- Pollack, Jeffrey M. (December 18, 2017) "Helping Juries Succeed." New Jersey Law Journal. Accessed June 7, 2018 via <https://www.law.com/njlawjournal/sites/njlawjournal/2017/12/18/helping-juries-succeed/?sreturn=20180507173148>.
- Randall, J. & L. Graf (2014) Linguistics meets "legalese": syntax, semantics, and jury instruction reform. Proceedings of the Linguistics Society of America Annual Meeting. Minneapolis. <https://www.northeastern.edu/cssh/english/linguistics-meets-legalese>
- Randall, J. (2014) Tackling "legalese": how linguistics can simplify legal language and increase access to justice. In Emonds, Joseph & Marketa Janebova (eds.) Language Use and Linguistic Structure. Olomouc Modern Language Series Vol.3. Univerzita Palackeho, Olomouc, 239-254.
- Randall, J. (2015) Improving juror comprehension: reading while listening. Proceedings of the Linguistics Society of America Annual Meeting. Portland. (pp. 1-5)
- Randall, J., L. Graf & N. Clarke (2015) Improving juror comprehension: reading while listening. Presented at the Linguistics Society of America Annual Meeting, Portland, OR.
- Randall, J. (2017) Improving Jury Instructions: The Effect of Linguistic and Procedural Factors. (with Yian Xu, Katherine Fiallo, & Haley Emerson). Proceedings of the American Psychology-Law Society Annual Meeting. Seattle.
- Randall, J. (in press) How Just is Justice? Ask a psycholinguist. In Carlson, Katy, Charles Clifton Jr. & Janet Dean Fodor, Grammatical Approaches to Language Processing – Essays in Honor of Lyn Frazier. Studies in Theoretical Psycholinguistics, Springer, NY.
- Reifman, A. S.M. Gusick & P.C. Ellsworth (1992) Real Jurors' Understanding of the Law in Real Cases. Law and Human Behavior 16, 539-554.
- Saxton, Bradley (1998) How Well Do Jurors Understand Jury Instructions? A Field Test Using Real Juries and Real Trials in Wyoming. Land & Water Law Review 33, 59-189.

References

- Schane, S. (2006) *Language and the Law*. London: Continuum.
- Shuy, Roger W. (2007) Language in the American courtroom. *Language and Linguistics Compass* 1: 100–114.
<http://dx.doi.org/10.1111/j.1749-818X.2007.00002.x>
- Slobin, D.I. (1966). Grammatical transformations and sentence comprehension in childhood and adulthood. *Journal of Verbal Learning and Verbal Behavior*, 5, 219–227.
- Solan, Lawrence M. (1999) Refocusing the Burden of Proof in Criminal Cases: Some Doubt About Reasonable Doubt, *Texas Law Review* 78, 105-147.
- Smith, S.M., & Rothkopf, E.Z. (1984). Contextual enrichment and distribution of practice in the classroom. *Cognition and Instruction*, 1(3), 341-358.
- Spyridakis, J.H. & Isakson, C.S. (1998). Nominalizations vs denominalizations: do they influence what readers recall? *Journal of Technical Writing & Communication* 28(2), 163-188.
- Steele, W.W. & Thornburg, E. G. (1988) Jury instructions: a persistent failure to communicate. *North Carolina Law Review* 67: 77–119.
- Tiersma, Peter M. (2009) *Communicating with Juries: How to Draft More Understandable Jury Instructions*. Loyola-LA Legal Studies Paper No. 2009-44. Available at SSRN: <http://ssrn.com/abstract=1507298> and through National Center for State Courts http://www.ncsconline.org/d_research/publications.html

References

- Tiersma, Peter M. (2001) The Rocky Road to Legal Reform: Improving the Language of Jury Instructions. *Brooklyn Law Review* 66, 1081-1118.
- Tiersma, Peter M. (1993) Reforming the Language of Jury Instructions. *Hofstra Law Review* 22, 37- 78.
- Tiersma, Peter M. (1999) Jury Instructions in the New Millennium. *Court Review* 36, 28-36.
- Wason, P. C. (1959). The processing of positive and negative information. *Quarterly Journal of Experimental Psychology*, 11, 92–107.

Questions?

Comments?

Thank you.

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