

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/327816621>

Judges vs Jurors: Biased Attributions in the Courtroom

Article in *Cornell International Law Journal* · April 2020

CITATIONS

0

READS

57

3 authors:



Goran Dominioni

Dublin City University

25 PUBLICATIONS 65 CITATIONS

[SEE PROFILE](#)



Pieter Desmet

Erasmus University Rotterdam

20 PUBLICATIONS 217 CITATIONS

[SEE PROFILE](#)



Louis T. Visscher

Erasmus University Rotterdam

73 PUBLICATIONS 161 CITATIONS

[SEE PROFILE](#)

Some of the authors of this publication are also working on these related projects:



Project

[Behavioral Public Policy View project](#)



Project

[Carbon Pricing View project](#)

Judges Versus Jurors: Biased Attributions in the Courtroom

Goran Dominioni,[†] Pieter Desmet^{††}
& Louis Visscher^{†††}

The fundamental purpose of a tort trial is to allocate responsibility. However, attributing fault is difficult, and decades of research in psychology have shown that human beings are prone to make systematic errors in performing this task. What can be done about this? The United States and countries in continental Europe adopt diametrically opposed strategies to reduce errors in the attribution of responsibility in the courtroom. American law delegates fact-finding to jurors and makes some type of evidence inadmissible in court to protect jurors from potentially biasing information, such as character evidence. European legal systems, instead, employ almost exclusively judges to perform fact-finding and allow character evidence at trial, under the assumption that judges are better than laypeople in weighing the probative value of this type of evidence. There is a long-standing debate among legal scholars on whether the American or the European approach reduces more trial errors, but the relative performance of the two legal systems remains largely untested. This article is the first to provide evidence on the relative performance of these two systems. Our results suggest that jurors fail to correctly apply European rules of character evidence. The American rules on the inadmissibility of character evidence seem therefore a more appropriate choice when fact-finding is performed by jurors. We find also that, contrary to jurors, judges apply European rules correctly and thus reduce the risk of errors in the attribution of responsibility. Overall, this result indicates that the American and the European evidence rules to improve fact-finding are well set up. Nonetheless, we also find that neither of the two systems is able to prevent factfinders' errors in the attribution responsibility when these mistakes are not due to the type of evidence presented at trial but to (unconscious) beliefs held by factfinders themselves. We thus propose a set of policies

[†] Visiting Researcher, Cornell Law School. We thank Maria Bigoni, Jeffrey Rachlinski, the participants of the 13th Conference on Empirical Legal Studies at Cornell Law School, of the IMPRS poster presentation at the Friedrich-Schiller-Universität Jena, of the BACT Lunch Seminar at Erasmus University Rotterdam, and of the Italian Society of Law and Economics 12th Annual Conference for useful discussion. The usual disclaimer applies. We are also very grateful to Sara Mahmoud for invaluable organizational support.

^{††} Associate Professor of Behavioral Law and Economics, Rotterdam Institute of Law and Economics, Erasmus School of Law.

^{†††} Professor of Legal Economic Analysis of Tort and Damages, Rotterdam Institute of Law and Economics, Erasmus School of Law.

that could improve factfinders' ability to avoid mistakes in attributing responsibility.

Introduction	236
I. Injustice in The Courtroom: The Fundamental Attribution Error in Legal Scholarship	240
II. Attribution Errors and the Regulation of Character Evidence in America and Europe	242
III. Attributional Errors: The Judge Versus the Layperson	243
IV. The Experiment	248
A. Participants	248
B. Design	250
C. Stimuli and Measures	250
V. Results	253
A. Manipulation Check	253
B. Attribution of Causality	254
C. Responsibility	254
D. Percentage of Damages Awarded	255
VI. Discussion	255
VII. Limitations	258
VIII. Implications for the Court System	258
A. Make Judges and Jurors Count	258
B. Discussing in the Courtroom	259
C. Writing in Third Person	259
Conclusion	261

Introduction

The fundamental purpose of a tort trial is to allocate responsibility. The factfinder must determine if the defendant is at fault for any harm that befell the plaintiff, whether the plaintiff is at fault, or whether the harm was the result of unavoidable circumstances. Attributing fault is a difficult task, and people often make mistakes doing so. But doing justice at trial requires that factfinders attribute fault logically, accurately, and consistently. Are judges better at allocating responsibility than jurors?

Consider an example. After many years of hard work, Brenda manages to buy an old summer house in need of restoration. Before moving into the new place, she asks Adam, a local bricklayer, to fix the roof of her house. A few months following the reparation, a whirlwind hits various houses in the area, badly damaging the roof of Brenda's house, but leaving the other houses' roofs intact. After the incident, Brenda discovers that other buildings previously repaired by Adam presented structural problems just a few months after their reparations took place and accuses him of not having duly repaired her roof. Who is at fault—Adam for having negligently repaired the roof, or is Brenda's loss an unavoidable product of whirlwinds and the natural deterioration of old houses? Legal systems everywhere rely on factfinders to weigh these circumstances and make these judgments consistently. Decades of research, however, suggest that human beings are

prone to make fundamental mistakes in attributing responsibility: we tend to underestimate the role of situational factors and overweigh personality-based explanations for events that we observe.¹ When an accident occurs, we tend to unduly look for someone with a bad character to blame and downgrade other (situational) explanations for the accident.² In the example above, factfinders that commit this cognitive error will unduly think that Adam has a propensity to repair roofs negligently and thus blame him for the accident while underestimating the causal contribution of the whirlwind to the loss of Brenda. To be clear, it is very well possible that Adam's negligent behavior caused the accident in that specific occasion, but research in psychology shows that, generally, human beings have a tendency to underestimate the causal contribution of non-human factors to the negative events we experience and look for a person to blame.³ This cognitive error is so embedded in human nature that it is referred to as the fundamental attribution error (FAE).⁴ Many legal scholars have expressed concern that the FAE may lead factfinders to make innocent defendants liable⁵ and judges to develop unjust legal doctrines that perpetuate racial and gender inequalities.⁶ What can be done about this?

The United States and European civil law countries (hereinafter European countries) tend to adopt opposed strategies to minimize the risks of errors in the attribution of fault. European countries employ almost exclusively judges for fact-finding, assuming that they perform well, and better than jurors, at this task.⁷ The United States, instead, tends to rely more on the wisdom of the layperson (i.e., jurors) but adopts stricter evidentiary

1. Jon D. Hanson & Michael McCann, *Situationist Torts*, 41 LOY. L.A. L. REV. 1345, 1359-66, (2008); Jon D. Hanson & David G. Yosifon, *The Situation: An Introduction to the Situational Character, Critical Realism, Power Economics, and Deep Capture*, 152 U. PA. L. REV. 129, 153 (2003); Lee Ross, *The Intuitive Psychologist and His Shortcomings: Distortions in the Attribution Process*, in *ADVANCES IN EXPERIMENTAL SOCIAL PSYCHOLOGY* 173, 184 (Leonard Berkowitz ed., vol. 10, 1977).

2. See Hanson & McCann, *supra* note 1, at 1361.

3. See generally Hanson & McCann, *supra* note 1, at 1359-66; Hanson & Yosifon, *supra* note 1, at 153.

4. Ross, *supra* note 1, at 184. This attributional error is sometimes referred to as correspondence bias. See Donald A. Dripps, *Fundamental Retribution Error: Criminal Justice and the Social Psychology of Blame*, 56 VAND. L. REV. 1383, 1388 (2003).

5. See, e.g., Jerry Kang, *Trojan Horses of Race*, 118 HARV. L. REV. 1489, 1565-66 (2005); Hanson & Yosifon, *supra* note 1. See also Justin D. Levinson & Kaiping Peng, *Different Torts for Different Cohorts: A Cultural Psychological Critique of Tort Law's Actual Cause and Foreseeability Inquiries*, 13 S. CAL. INTERDISC. L.J. 195, 206-07 (2004); Robert A. Prentice, *Behavioral Economics Applied: Loss Causation*, 44 LOY. U. CHI. L.J. 1509, 1537-38 (2012); Victor D. Quintanilla, *(Mis)judging Intent: The Fundamental Attribution Error in Federal Securities Law*, 7 N.Y.U. J.L. & BUS. 195, 200-02 (2011).

6. See MARTHA CHAMALLAS & JENNIFER B. WRIGGINS, *THE MEASURE OF INJURY: RACE, GENDER, AND TORT LAW* 152-53 (2010). On how judges' and jurors' biases in tort trials can create and perpetuate racial and gender inequalities see Goran Dominioni, *Biased Damages Awards: Gender and Race Discrimination in Tort Trials*, 1 INT'L COMP., POL'Y & ETHICS L. REV. 269 (2018).

7. Simona Grossi, *A Comparative Analysis Between Italian Civil Proceedings and American Civil Proceedings Before Federal Courts*, 20 IND. INT'L & COMP. L. REV. 213, 223-24 (2010).

rules to limit the use of potentially biasing items of evidence.⁸ A type of evidence that is particularly relevant in this regard is the one that regulates the use of character evidence. Character evidence informs factfinders about past behaviors of one of the parties at trial. Thus, for example, Brenda may present evidence showing that Adam was negligent in fixing some of the structural problems of the houses he previously repaired to prove his negligent behavior in the case at hand. Many scholars consider character evidence a type of evidence that may lead judges and jurors to make faulty attributions at trial.⁹ Going back to the accident example, the concern with the FAE is that, when presented with character evidence, judges and jurors will overestimate the likelihood that the cause of the accident is the negligent behavior of Adam (who, allegedly, has the disposition to act negligently) instead of the whirlwind (a situational explanation of the accident). European legal systems do not adopt this strict ban. Instead, they often dictate judges to assign the lowest probative value to character evidence.¹⁰

Despite the longstanding debate on which of these two systems produces better trial decisions,¹¹ their relative performance remains largely untested. Prominent legal scholars defend the idea that judges are less prone to commit the FAE at trial on the ground that experience in adjudication refines judges' ability to attribute responsibility¹² and that individuals who embark in a judicial career are generally less prone to commit attributional errors than the general population.¹³ But, is this so? This article is the first to analyze this question empirically.

8. John Sheldon & Peter Murray, *Rethinking the Rules of Evidentiary Admissibility in Non-Jury Trials*, 86 JUDICATURE 227, 227-28 (2003); Grossi, *supra* note 7, at 246.

9. Frederick Vars, *Behavioral Economics and Evidence Law*, in THE OXFORD HANDBOOK OF BEHAVIORAL ECONOMICS AND THE LAW 703, 711-14 (E. Zamir & D. Teichman eds., Oxford Univ. Press 2014). See also Chris W. Sanchirico, *Character Evidence and the Object of Trial*, 101 COLUM. L. REV. 1227, 1241-42 (2001) (reviewing this literature).

10. TRATTATO DI DIRITTO CIVILE E COMMERCIALE: LA PROVA NEL PROCESSO CIVILE 345 (Michele Taruffo ed., Giuffr  Editore, 2012). See also Grossi, *supra* note 7, at 224 ("The rules governing evidence do not give much weight to circumstantial evidence and inferences. They place much more emphasis on direct evidence.")

11. See Sheldon & Murray, *supra* note 8, at 228. See also Frederick Schauer, *On the Supposed Jury-Dependence of Evidence Law*, 155 U. PA. L. REV. 165, 194 (2006). See generally David A. Sklansky, *Anti-Inquisitorialism*, 122 HARV. L. REV. 1634 (2009) (reviewing a long-standing debate on the relative advantages of civil law and Common law trials).

12. Adam Benforado & Jon D. Hanson, *The Great Attributional Divide: How Divergent Views of Human Behavior Are Shaping Legal Policy*, 57 EMORY L.J. 311, 349-50 (2007).

13. *Id.* at 360. Relatedly, there is also a widespread belief among U.S. judges and legal scholars that judges are better able than laypeople to ignore inadmissible items of evidence, such as character evidence. On legal scholarship, see, for example, FED. JUDICIAL CTR., MANUAL FOR COMPLEX LITIGATION (Fourth) § 11.431, at 63-64 (2004); Leo Levin & Harold K. Cohen, *The Exclusionary Rules in Nonjury Criminal Cases*, 119 U. PA. L. REV. 905, 916 (1971); Andrew J. Wistrich, Chris Guthrie & Jeffrey J. Rachlinski, *Can Judges Ignore Inadmissible Information? The Difficulty of Deliberately Disregarding*, 153 U. PA. L. REV. 1251, 1255-56 (2005) (reviewing this literature). On judicial opinions, see *Harris v. Rivera*, 454 U.S. 339, 345-46 (1981); *State v. Garcia*, 397 P.2d 214, 216 (Ariz. 1964); *Commonwealth v. Davis*, 421 A.2d 179, 183 n.6 (Pa. 1980); *Commonwealth v. Glover*, 405 A.2d 945, 947 (Pa. Super. Ct. 1979).

Our article is also the first to analyze whether continental Europe's regulation of character evidence is effective in reducing the risk that factfinders commit the FAE at trial. In doing so, we complement previous studies that focused on the effectiveness of American rules on inadmissible evidence in addressing errors in judicial decision-making,¹⁴ thus allowing a comparison of the performance of the two systems.

We find that laypeople commit errors when applying European rules of character evidence. Since these rules aim to prevent errors in the attribution of responsibility, our results show that the European legal system is not able to prevent mistakes when fact-finding is performed by jurors. Thus, in jury trials, American rules on the inadmissibility of character evidence seem a more appropriate choice. Our results also show that judges are able to correctly apply European rules of character evidence and thus are more likely to avoid errors in fact-finding when character evidence is presented at trial. When taken together, our results indicate that evidence rules in both the United States and Europe are well set up.

However, our results also indicate that neither of the two systems are able to prevent judges and jurors from committing errors in the attribution of responsibility when these mistakes are not due to items of evidence presented at trial, such as character evidence, but rather to (unconscious) beliefs held by factfinders themselves. In particular, we find that the two groups have a similar propensity to commit the FAE; and that in both samples, those who have a (unconscious) personal tendency to commit the FAE consistently assign greater responsibility to tortfeasors. In particular, we find that judges and laypeople have a similar propensity to commit the FAE; and that in both groups participants that have a tendency to commit the FAE are more likely to hold the defendant responsible for the accident, regardless of whether character evidence is presented at trial. This result suggests that neither the American nor European trials are likely to be bulletproof against the FAE. Given these results, this article also discusses court practices that could reduce the risks of attributional errors in trial settings.

The remainder of this work unfolds as follows: Part I introduces the legal scholarship on the FAE and highlights how psychological research on this phenomenon has been widely influential in the legal debate. Part II illustrates the relation between character evidence and attributional errors. This part also compares the American and the European approaches to the regulation of character evidence. Part III discusses research indicating that individuals that embark on a judicial career are less prone to commit the FAE at trial. We describe the experiment in Part IV. We report results in Part V and discuss them in Part VI. We report limitations in Part VII. Part

14. For a recent review of this literature see Doron Teichman & Eyal Zamir, *Judicial Decision-Making A Behavioral Perspective*, in *THE OXFORD HANDBOOK OF BEHAVIORAL ECONOMICS AND THE LAW* 664, 671-73 (E. Zamir & D. Teichman eds., Oxford Univ. Press, 2014); Wistrich, Guthrie & Rachlinski, *supra* note 13, at 1259. For a review of psychological and sociological research on character evidence see generally MIKE REDMAYNE, *CHARACTER IN THE CRIMINAL TRIAL* (2015).

VIII discusses normative implications for the court systems in Europe and the US.

I. Injustice in The Courtroom: The Fundamental Attribution Error in Legal Scholarship

Starting from the seminal work by Lee Ross,¹⁵ a large body of evidence shows that the FAE is a diffuse phenomenon, at least in the Western world.¹⁶ For instance, a well-known study that is often interpreted as showing the existence of the FAE is the Milgram's study on obedience.¹⁷ In this study, participants took part in an experiment allegedly aimed to test whether memory skills can be improved through the use of punishment.¹⁸ Each participant was assigned to the role of "teacher" while an actor pretended to be a participant in the experiment and took the part of the "learner." The learner had to learn pairs of words and remember them when asked by the teacher. When the answer provided was wrong, the teacher was asked to punish the learner by delivering an electric shock of increasing intensity for each mistake made, up to 450 w. Unknown to the participants, these electric shocks were not real. Nonetheless, the actor pretended to receive pain from the punishment. Depending on the degree of punishment received, the learner started complaining about the pain, asked to stop the experiment, screamed, and at higher levels of punishment pretended to have lost his senses. Sixty-five percent of the participants went on up to the maximum level of punishment, despite forty U.S. psychiatrists having predicted that only 1 out of 1000 would do so. This result shows that the psychiatrists failed to understand the determinants of participants' behavior, i.e., they underestimated the power that the request of the experimenter to harm the learner (a situational factor) had in determining teachers' behavior and overestimated the importance of teachers' unwillingness to harm the learner (a dispositional factor).¹⁹

Psychological research of the FAE²⁰ is having a significant impact on American legal scholarship,²¹ especially in the areas of tort and criminal law. In the tort law sphere, various authors highlight how the FAE skews

15. Ross, *supra* note 1, at 184-85.

16. Christopher W. Bauman & Linda J. Skitka, *Making Attributions for Behaviors: The Prevalence of Correspondence Bias in the General Population*, 32 BASIC & APPLIED SOC. PSYCHOL. 269, 275 (2010); Incheol Choi, Richard E. Nisbett & Ara Norenzayan, *Causal Attribution Across Cultures: Variation and Universality*, 125 PSYCHOL. BULL. 47, 47-48 (1999).

17. See Hanson & Yosifon, *supra* note 1, at 149-52.

18. For a description of this study see MICHAEL J. SAKS & BARBARA A. SPELLMAN, *THE PSYCHOLOGICAL FOUNDATIONS OF EVIDENCE LAW* 153 (2016).

19. See Hanson & Yosifon, *supra* note 1, at 149-52.

20. See generally Hanson & Yosifon, *supra* note 1 (reviewing this literature).

21. See Chamallas & Wriggins, *supra* note 6, at 152; Kang, *supra* note 5, at 1565-66. See generally Hanson & Yosifon, *supra* note 1; Levinson & Peng, *supra* note 5, at 206-07; Prentice, *supra* note 5, at 1537-38; Quintanilla, *supra* note 5, at 200-02; Jeffrey J. Rachlinski, *The Psychological Foundations of Behavioral Law and Economics*, U. ILL. L. REV. 1675, 1693 (2011).

tort law decisions against innocent defendants.²² For instance, Prentice discusses the role of the FAE in determining investors' compensation in securities fraud law and argues that it is likely that this phenomenon can lead to inaccurate findings with regard to the causation requirement.²³ Along these lines, Quintanilla claims that the FAE may lead courts to too easily find intent in the application of federal security law.²⁴ Because of this, managers are unjustly made liable for their unintentional actions. Also, research indicates that the FAE may lead to racial and gender injustices in trial settings.²⁵ Various studies show that people are more prone to commit the FAE when observing negative behaviors of outgroup members than when confronted with unwarranted conduct of ingroup members.²⁶ Building on this research, prominent legal scholars argue that the FAE may perpetuate racial and gender injustices in the courtroom.²⁷

Part of the legal scholarship on the FAE has taken a radical step in highlighting the relevance of this phenomenon for the study of tort law. This strand of literature, referred to as situationism,²⁸ "[i]s premised on the social scientific insight that the naïve psychology—that is, the highly simplified, affirming, and widely held model for understanding human thinking and behavior—on which our laws and institutions are based is largely wrong."²⁹ Situationists' main claim is that current legal scholarship in general, and the law and economics' rational actor model in particular, is built on an erroneous conception of the determinants of human behavior, which ignores the crucial role that situations play in shaping how humans behave.³⁰ Starting from these premises, Hanson and McCann argue that the human tendency to deny the appropriate role played by situations in determining human conduct may have contributed to producing an unjust tort law system in which, for instance, smokers bear the harm of their smoking habits despite corporations largely influencing these habits through advertisement.³¹ Hanson and McCann bring their reasoning a step further. According to their thesis, cigarette producers consciously take advantage of the existence of the FAE by advertising smoking as an expression of freedom, thus spreading the idea that smokers freely choose to smoke.³² This idea, in turn, influences courts' perception of the determinants of smoking behavior and thus indirectly affects the attribution of

22. See Levinson & Peng, *supra* note 5, at 206-07.

23. See Prentice, *supra* note 5, at 1537-38.

24. See Quintanilla, *supra* note 5, at 200-02.

25. Thomas F. Pettigrew, *The Ultimate Attribution Error: Extending Allport's Cognitive Analysis of Prejudice*, 5 PERSONALITY & SOC. PSYCHOL. BULL. 461, 464 (1979).

26. See *id.*; Kang, *supra* note 5, at 1565-66.

27. See CHAMALLAS & WRIGGINS, *supra* note 6, at 152; Kang, *supra* note 5, at 1565-66.

28. See generally Hanson & Yosifon, *supra* note 1.

29. Hanson & McCann, *supra* note 1, at 1359 (citing *About Situationsim*, SITUATIONISM, <https://thesituationist.wordpress.com/about-situationism/> [https://perma.cc/8SJQ-29EX] (last visited, December 27, 2019)).

30. Hanson & Yosifon, *supra* note 1, at 154.

31. Hanson & McCann, *supra* note 1, at 1374-75.

32. *Id.*

liability in cigarettes-related tort law cases to the advantage of producers. This scholarship goes so far as to argue that to avoid inaccuracies in adjudication due to the FAE, academics should reform the way in which tort law is taught in law school. In particular, Hanson and McCann propose a situationist model in which students learn to recognize situational forces that shape human behavior.³³

In criminal law, Dripps invites considering the FAE as one of the main risks for legal decision-making and proposes that legislators should be more attentive to acquittals based on defenses that redirect the blame towards a person than to those in which non-human factors justify or excuse the conduct of the defendant.³⁴ Along these lines, Ross and Shestowsky maintain that dispositionism (i.e., the tendency to attribute one's behavior to his/her disposition) among factfinders over-restricts the scope for the recognition of mitigating circumstances that would warrant a more lenient treatment of criminal defendants.³⁵ Recent literature builds upon the research on the FAE to argue that incapacitation of past offenders is not a justification of punishment.³⁶

II. Attribution Errors and the Regulation of Character Evidence in America and Europe

As shown in Part I, the FAE is widely seen as a key driver of the functioning of the U.S. criminal and tort law systems. Various authors have also argued that the American legal system embeds rules and practices that aim to limit the effect of the FAE on trial outcomes.³⁷ In this respect, a key set of rules are those that regulate the use of character evidence at trial.

Since character evidence highlights parties' dispositions by providing information regarding the consistency of the behavior under scrutiny with past conduct, it is a type of evidence that is likely to trigger the FAE in trial settings.³⁸ Indeed, a major rationale underlying the existence of rules that aim to inhibit the misuse of character evidence is the fear that it may trigger errors in the attribution of responsibility.³⁹ These rules are different in American law and the law in many European civil law countries.

With some important exceptions, character evidence is not admissible in U.S. jury trials. This ban on character evidence is set forth by Federal Rule of Evidence (FRE) 404.⁴⁰ This provision is part of a broader set of rules inspired by epistemic paternalism that regulates the admissibility of evidence at trial with the aim of preventing the jury from making a deci-

33. *Id.* at 1398.

34. Dripps, *supra* note 4, at 1416-17.

35. Lee Ross & Donna Shestowsky, *Contemporary Psychology's Challenges to Legal Theory and Practice*, 97 NW. U. L. REV. 1081, 1087 (2002).

36. Guyora Binder & Ben Notterman, *Penal Incapacitation: A Situationist Critique*, 54 AM. CRIM. L. REV. 1, 2 (2017).

37. Benforado & Hanson, *supra* note 12, at 356-57; Vars, *supra* note 9, at 711-14.

38. Vars, *supra* note 9, at 711-14.

39. *Id.*

40. FED. R. EVID. 404.

sion on the basis of items of evidence whose “probative value is substantially outweighed by a danger of . . . unfair prejudice, confusing the issues, [and] misleading the jury.”⁴¹

Interestingly, the legislative ban on character evidence in American law is rarely mirrored by a similar rule in continental Europe, where the utilization of jurors is fairly rare. Civil law judges are routinely exposed to a considerable amount of propensity evidence.⁴² For instance, under Italian law,⁴³ with some exceptions, this type of evidence is freely admissible at trial.⁴⁴

Yet, even in Europe, the use of character evidence is not completely unregulated. In fact, while free evaluation of evidence is a core principle of evidentiary rules in many European countries, factfinders are expected to evaluate evidence according to rational standards.⁴⁵ In this connection, character evidence is often considered an item of evidence with the lowest probative value.⁴⁶ Therefore, legal scholars argue that judges cannot hold the defendant liable when the only evidence available at trial is character evidence.⁴⁷ In this sense, European factfinders are expected to not overestimate the probative value of this type of evidence. This expectation can be seen as an attempt by the legal system to avoid the influence of the FAE on judicial decisions.

In the present work, we test the effectiveness of this European rule to reduce the use of character evidence at trial. In doing so, we shed new light on the relative performance of American law and European law to reduce errors in the attribution of responsibility in the courtroom.

III. Attributional Errors: The Judge Versus the Layperson

Besides contextual factors, such as character evidence, empirical research has also highlighted the existence of individual differences in the propensity to commit the FAE.⁴⁸ Adam Benforado and Jon Hanson⁴⁹ put forward the hypothesis that in trial settings judges are less likely to commit the FAE than laypeople. While their claim is restricted to the American judiciary, the factors they identify to support their conclusion are widely shared by European judiciaries. In fact, their claim is based on the following observations: i) Judges are routinely confronted with the task of mak-

41. FED. R. EVID. 403.

42. Mirjan R. Damaska, *Propensity Evidence in Continental Legal Systems*, 70 CHI. KENT L. REV. 55, 56 (1994); Stewart Field, *State, Citizen, and Character in French Criminal Process*, 33 J. LAW SOC., 522, 523-24 (2006).

43. The present experiment was conducted with Italian subjects. For this reason, this section puts emphasis on the regulation of character evidence under Italian law.

44. Grossi, *supra* note 7, at 224.

45. See generally Michele Taruffo, *Evidence Law*, in INTERNATIONAL ENCYCLOPEDIA OF COMPARATIVE LAW 19-39 (M. Cappelletti eds., vol. XVI, 2014).

46. TRATTATO DI DIRITTO CIVILE E COMMERCIALE, *supra* note 10, at 345; Grossi, *supra* note 7, at 224.

47. Grossi, *supra* note 7, at 224.

48. Bauman & Skitka, *supra* note 16, at 275.

49. Benforado & Hanson, *supra* note 12, at 355.

ing attributions for human behavior.⁵⁰ This factor, in their view, should allow judges to test their consciously and unconsciously held beliefs on the determinants of human behavior (dispositions vs. situational factors) and thus bring judges toward a view of the world that is more attentive to the power of situational factors.⁵¹ ii) Judges, because of their role, are expected to make decisions that are fair, legitimate, and well-reasoned.⁵² This again may bring them to look more carefully at situational cues to make sense of the facts under scrutiny at trial. iii) Judges' attention to situational factors might be enhanced by institutional mechanisms and procedures of the trial.⁵³ For instance, by debating in front of the court, trial parties may highlight various contextual factors that might have influenced the conduct under scrutiny.⁵⁴ iv) Individuals that are more prone to understand the complex influence of situational factors on human behavior may self-select in the judiciary.⁵⁵ This, in turn, may create an environment in the judiciary that further promotes situationist views.⁵⁶ v) Situationism in the judiciary is enhanced when adjudicators are provided with the time and support (e.g., law clerks) to make their decisions.⁵⁷ This support should help them to undergo a more thorough deliberation of the facts under scrutiny at trial. vi) Adjudicators are routinely confronted with opposing views (those of the parties and other trial participants such as experts) on a subject matter.⁵⁸ This diversity of encounters may help judges to learn how to distinguish situational from personality-based determinants of human behavior. For instance, this may occur when subjects with very different backgrounds act similarly in a certain situation, indicating that this behavior is common among individuals who find themselves in that situation.⁵⁹ vii) The accountability mechanisms (appeal review, publication of the motivation, etc.) that surround the adjudication process foster situationist views by pushing judges to think more thoroughly when making a decision.⁶⁰ All of these factors are shared by European judges and trial systems. The overall outcome of their analysis is that, at least in trial settings, adjudicators are likely to hold a relatively more situationist view of human behavior than the general population.⁶¹ However, this hypothesis is yet to be tested.

Note that the hypothesis proposed by Benforado and Hanson is not obvious. Empirical research casts doubt on the effectiveness of some of the mechanisms described above to promote situationism. For instance, while it is true that judges' role, as well as the institutional environment in which

50. *Id.* at 349-50.

51. *Id.*

52. *Id.* at 354-56.

53. *Id.* at 356-57.

54. *Id.*

55. Benforado & Hanson, *supra* note 12, at 360.

56. *Id.*

57. *Id.* at 361-62.

58. *Id.* at 362, 364.

59. *Id.* at 364.

60. *Id.* at 364-65.

61. Benforado & Hanson, *supra* note 12, at 348-49.

they operate, should motivate them to make accurate decisions, the feedback they receive on their performance is often rather limited.⁶² In addition, while it might be the case that individuals who tend to look for complex explanations for human behavior self-select in the judiciary, this is not the only relevant demographic variable. For instance, high-status people tend to explain life events more as a result of a person's disposition and reject restorative views of punishment, i.e., views that focus on criminal rehabilitation, than low-status people.⁶³ Judges are a high-status group both in the United States and in continental Europe.

Generally, research indicates that judges are only sometimes better than laypeople at avoiding the making of biased trial decisions.⁶⁴ While there are some important exceptions to this trend,⁶⁵ judges' decisions are often influenced by their political beliefs,⁶⁶ identity,⁶⁷ emotions,⁶⁸ and biases.⁶⁹ The first important question, therefore, remains whether judges are really less prone to make faulty attributions of responsibility at trial. This work aims to provide an answer to this question.

A second question remaining is whether judges outperform laypeople in applying rules that the legal system sets to reduce regarding the influence of the FAE on their own decisions. As mentioned above, when it comes to character evidence, European legal systems adopt looser regulatory safeguards against the FAE than those found in American evidence law. This institutional arrangement is often justified by the idea that judges are able to correctly handle character evidence.⁷⁰ In this view, widely held by judges⁷¹ and scholars,⁷² judges are unbiased factfinders

62. Chris Guthrie, Jeffrey J. Rachlinski & Andrew J. Wistrich, *Blinking on the Bench: How Judges Decide Cases*, 93 CORNELL L. REV. 1, 32 (2007).

63. See Michael W. Kraus & Dacher Keltner, *Social Class Rank, Essentialism, and Punitive Judgment*, 105 J. PERSONALITY & SOC. PSYCHOL. 247, 258 (2013); Michael E. Varnum et al., *Social Class Differences in N400 Indicate Differences in Spontaneous Trait Inference*, 141 J. EXPERIMENTAL PSYCHOL. GEN. 518, 518-19 (2012) (reviewing literature that indicates social class differences in propensity to commit the FAE).

64. See generally Teichman & Zamir, *supra* note 14, at 693.

65. See, e.g., Jeffrey J. Rachlinski, Chris Guthrie & Andrew J. Wistrich, *Probable Cause, Probability, and Hindsight*, 8 J. EMPIRICAL LEGAL STUD. 72, 96 (2011).

66. See LEE EPSTEIN, WILLIAM M. LANDES & RICHARD A. POSNER, *THE BEHAVIOR OF FEDERAL JUDGES: A THEORETICAL AND EMPIRICAL STUDY OF RATIONAL CHOICE* 65 (2013).

67. See Oren Gazal-Ayal & Raanan Sulitzeanu-Kenan, *Let My People Go: Ethnic In-Group Bias in Judicial Decisions—Evidence from a Randomized Natural Experiment*, 7 J. EMPIRICAL LEGAL STUD. 403, 415-17 (2010).

68. See Andrew J. Wistrich, Jeffrey J. Rachlinski & Chris Guthrie, *Heart Versus Head: Do Judges Follow The Law Or Follow Their Feelings*, 93 TEX. L. REV. 855, 862-64 (2014).

69. Chris Guthrie, Jeffrey J. Rachlinski & Andrew J. Wistrich, *The "Hidden Judiciary": An Empirical Examination of Executive Branch Justice*, 58 DUKE L.J. 1477, 1521-22 (2009).

70. See Sheldon & Murray, *supra* note 8, at 227-28.

71. See *Harris v. Rivera*, 454 U.S. 339, 346 (1981); *State v. Garcia*, 397 P.2d 214, 216 (Ariz. 1964); *Commonwealth v. Davis*, 421 A.2d 179, 183 (Pa. 1980); *Commonwealth v. Glover*, 405 A.2d 945, 947 (Pa. Super. Ct. 1979).

72. See FED. JUDICIAL CTR., *supra* note 13, at 63-64; Grossi, *supra*, note 7, at 224; Levin & Cohen, *supra* note 13, at 916.

who are able to avoid cognitive errors arising from exposure to this type of evidence.

Yet, does expertise in adjudication improve the ability to assign character evidence its legally prescribed probative value? Existing research on similar types of evidence provides mixed results. A meta-analysis of studies conducted with laypeople indicates that evidence of prior convictions has some impact on laypeople's decisions in mock trials.⁷³ A similar result was obtained in a 2005 study conducted on 265 U.S. judges by Andrew Wistrich and co-authors,⁷⁴ who tested the judges' propensity to use inadmissible evidence in a series of civil and criminal cases. In each case, judges in the treatment group were presented with various forms of inadmissible evidence. Of particular relevance for the present work are the third⁷⁵ and fourth⁷⁶ studies, which analyzed the effect of parties' previous conducts (tendency to sexual promiscuity and previous convictions) on trial outcomes. These studies find that judges are not able to disregard this information.⁷⁷ This holds true regardless of the years of experience of the judge.⁷⁸ However, while certainly informative, the study by Wistrich and co-authors does not fully capture the dynamics underlying the functioning of the FAE in relation to character evidence. In the presence of character evidence, the FAE may lead individuals to overestimate the probability that a person's conduct will be repeated in the future. Going back to the example above, evidence of previously badly-repaired houses could lead judges to believe that Adam was negligent in repairing Brenda's roof. For this reason, it is important that the previous conduct (presented with the evidence) matches the one under scrutiny at trial. In the study conducted by Wistrich and co-authors,⁷⁹ previous criminal convictions for fraud are introduced in a tort trial to undermine the credibility of the plaintiff;⁸⁰ in the sexual promiscuity evidence scenario, this evidence was provided to hint at the fact that the woman that was allegedly raped had in fact given her consent to the alleged rapist. Thus, in both scenarios, the evidence of the previous conduct was only partially related to the one under scrutiny at trial. Our study differs from the one by Wistrich and co-authors in two main ways. First, we test the effect of previous convictions on the decisions made in a case that presents very similar facts.⁸¹ This is the most suitable way to test the FAE in relation to character evidence. Second, we test the European rule on character evidence, which contrary to American law,

73. For a meta-analysis of this literature see Dennis J. Devine & David E. Caughlin, *Do They Matter? A Meta-Analytic Investigation of Individual Characteristics and Guilt Judgments*, 20 PSYCHOL. PUB. POL'Y & LAW 109, 116 (2014).

74. Wistrich, Guthrie & Rachlinski, *supra* note 13, at 1259.

75. *Id.* at 1298-1304.

76. *Id.* at 1304-08.

77. *Id.* at 1259.

78. *Id.* at 1302, 1307.

79. *Id.* at 1300-06.

80. *Id.* at 1305-06.

81. See *infra* Part IV.C, discussing this more at length.

does not require us to ignore character evidence, but only to assign it the lowest probative value.

Another strand of literature that is relevant for the present study is the one that, more generally, analyzes judges' ability to disregard inadmissible information.⁸² Landsman and Rakos test in a tort law scenario whether judges and lay adjudicators differ in their ability to disregard evidence of subsequent remedial measures. This study found no differences between the two groups.⁸³ Similar findings were obtained in a more recent work by Saul Wallace and Holly Kassin.⁸⁴ Here, judges were not able to disregard information obtained via coercion during an interrogation. Again, this result was not dependent on judges' experience. This study replicated with judges a result that was obtained in an early analysis conducted with laypeople.⁸⁵ When taken together, this research suggests that the two groups (judges and laypeople) were similarly prone to use inadmissible evidence. Against these findings, Chris Guthrie and co-authors did not find evidence that American administrative judges are unable to ignore improperly authenticated evidence in a hypothetical trial scenario.⁸⁶ Similarly, a recent study shows that judges, regardless of years of experience at the bench, make similar decisions in hindsight and foresight when establishing probable cause.⁸⁷ This suggests that judges are not unduly influenced by the hindsight information. Overall, research on the effect of inadmissible evidence on experts' decision-making indicates that judges are sometimes able to provide inadmissible evidence its due probative value. Yet, given the mixed findings of this literature, it is difficult to predict under which conditions this occurs.

In this Article, we complement this literature by studying whether participants in our experiment are able to correctly apply rules of evidence adopted by several European legal systems to reduce the risk of errors in the attribution of responsibility at trial. In particular, we focus on evidentiary rules prevailing in Italy, but that are common to other main civil law traditions.⁸⁸ In doing so, we set the basis for an empirically informed debate on the relative performance of the American and the European legal systems.

82. Teichman & Zamir, *supra* note 14, at 664, 671-72 (2014) (reviewing this literature).

83. Stephan Landsman & Richard F. Rakos, *A Preliminary Inquiry into the Effect of Potentially Biasing Information on Judges and Jurors in Civil Litigation*, 12 *BEHAV. SCI. & L.* 113, 125 (1994).

84. See Brian D. Wallace & Saul M. Kassin, *Harmless Error Analysis: How Do Judges Respond To Confession Errors?*, 36 *LAW & HUM. BEHAV.* 151, 156 (2012).

85. See Saul M. Kassin & Holly Sukel, *Coerced Confessions and the Jury: An Experimental Test of the "Harmless Error" Rule*, 21 *LAW & HUM. BEHAV.* 27, 42 (1997).

86. See Guthrie, Rachlinski & Wistrich, *supra* note 69, at 1516-17.

87. See Rachlinski, Guthrie & Wistrich, *supra* note 65, at 96.

88. See, e.g., Damaška, *supra* note 42, at 55; Field, *supra* note 42, at 523-24.

IV. The Experiment

A. Participants

Most of the existing studies on expertise in adjudication have been conducted with judges that had, on average, substantial experience (i.e., more than ten years) of serving at the bench.⁸⁹ In addition, studies on expertise and decision-making often compare experts with subjects that have no experience whatsoever in performing tasks tested in the experiment.⁹⁰ Comparing senior experts with individuals that have no experience in performing adjudication tasks is certainly a meaningful enterprise to spot differences among the two groups. However, this clear-cut distinction captures only one part of reality. Nowadays most Western legal systems employ a large number of non-professional judges that serve the bench for very limited periods of time and that often have broad jurisdiction in civil and criminal cases.⁹¹ The selection criteria and appointment status vary from legal system to legal system as well as across different sub-categories of non-professional judges. For example, in Italy, more than 3700 honorary judges (*vis-a-vis* 6485 professional judges) routinely carry out judicial activities both in criminal and civil law trials. Italian honorary judges are nominated for a limited period of time (three or four years, renewable only once) and are chosen among individuals that have some degree of familiarity with the law (depending on the type of honorary judge, either a standard law degree or having passed the bar exam).⁹² Similarly, non-professional judges play a major role in the justice system of several EU countries.⁹³ In addition, the use of non-professional judges is not confined only to the European experience. For instance, U.S. justice courts employ a large number of non-professional judges with functions that vary from state to state.⁹⁴ In this connection, it can be interesting to

89. See Guthrie, Rachlinski & Wistrich, *supra* note 69, at 1492; Rachlinski, Guthrie, & Wistrich, *supra* note 65, at 77; Wallace & Kassin, *supra* note 84, at 153; Wistrich, Guthrie & Rachlinski, *supra* note 13, at 1218.

90. See, e.g., Ian K. Belton, Mary Thomson & Mandeep K. Dhimi, *Lawyer and Non-lawyer Susceptibility to Framing Effects in Out-of-Court Civil Litigation Settlement*, 11 J. EMPIRICAL LEGAL STUD 578, 587 (2014).

91. See EUROPEAN COMMISSION FOR THE EFFICIENCY OF JUSTICE, *STUDY ON THE FUNCTIONING OF JUDICIAL SYSTEMS IN THE EU MEMBER STATES: FACTS AND FIGURES FROM THE CEPEJ QUESTIONNAIRES 2010-2012-2013-2014-2015-2016*, at 4 (2018).

92. See Silvia Ciotti Galetti, *The Italian Court Honorary Judges*, in *POLICING IN CENTRAL AND EASTERN EUROPE: DILEMMAS OF CONTEMPORARY CRIMINAL JUSTICE* 443, 444 (Gorazd Meško, Milan Pagon, Bojan Dobovšek eds., 2004).

93. See generally Eric Dubois, Christel Schurrer & Marco Velicogna, *The Functioning of Judicial Systems and the Situation of the Economy in the European Union Member States*, REPORT PREPARED FOR THE EUROPEAN COMMISSION (DIRECTORATE GENERAL JUSTICE) (2013) (reviewing the use of non-professional judges in various European countries).

94. See, e.g., Susan L. Patnode, Julie A. Davies & Lisa A. Frisch, *Behind the Scenery, A Rural New York Portrait*, in *Rural Justice in New York State—Challenges and Recommendations*, 17 GOV'T, L. & POL'Y J. 1, 6 (2017) (discussing the employment of justices in New York that do not have a law degree). Note also that many professional judges in the US have little prior experience in practicing law. For instance, in 2014, 45.4% of U.S. circuit court judges had no prior experience as a judge before their appointment to a circuit court. Among those that had no prior experience as judges, about 20% had no

expand the inquiry of the influence of cognitive errors in adjudication to samples of subjects that have only a limited experience in adjudication, as this can shed new light on the decision-making of judges that have served only for a relatively short period of time (e.g., judges in their early career and non-professional judges).

To fill this gap, we recruited two independent samples of subjects. The first was composed of one hundred individuals (male = 35%; average age = 25.9; standard deviation (SD) = 1.22) enrolled in a Scuola di Specializzazione per le Professioni Legali (SSPL). SSPLs are two-year post JD schools that prepare law graduates to become Italian magistrates. Sixty of the SSPL participants were enrolled in the second year of the SSPL, while the remaining were enrolled in the first year. We collected data on first-year and second-year SSPL participants on two different days. We are therefore able to distinguish the answers provided by the two groups. Attendance of a SSPL provides direct access to the competitive public exam to access the judicial career. Nowadays, SSPLs are the main route via which magistrates are recruited in Italy.⁹⁵ Participation was incentivized through the offer of a buffet and a lottery with a 100-euro prize (about 117 USD).

To make sure that subjects in our sample were attending the school to subsequently join the judiciary, we asked participants after completion of the experiment whether they intended to enter the judiciary. Out of the 100 participants, 94 replied that they desired to enter the judiciary after the completion of the school. This sample is therefore composed of subjects who are very close to completing the education necessary to qualify for the exam to enter the Italian judiciary and that, at the time of the experiment, were to a large extent still motivated to pursue a judicial career. For this reason, we refer to them as to “judges-to-be.”

The second group was composed of 129 university students (male = 32.56%; average age = 21.2; SD = 2.28) enrolled in a law school (both at the graduate and undergraduate level, as Italian law schools are not divided into bachelor and master). No incentive was provided for participation. They were recruited in university libraries of the same city in which the SSPL is located. Subjects were selected with these criteria to provide some basic control for educational background and geographical location.

We compare the decision-making skills of judges-to-be with those of law students to test the hypothesis put forward by Benforado and Hanson.⁹⁶ If it is the case that individuals that decide to enter the judiciary tend on average to be more situationist than the rest of the population, we can expect subjects who embark on a judicial career after law school to be less dispositionist (i.e., tend less to commit the FAE), than the average law

experience as lawyers in private practice. Barry J. McMillion, *U.S. Circuit Court Judges: Profile of Professional Experiences Prior to Appointment*, CRS REPORT 1, 5 (2014).

95. See Giuseppe Di Federico, *Recruitment, Professional Evaluation, Career and Discipline of Judges and Prosecutors in Italy*, in *RECRUITMENT, PROFESSIONAL EVALUATION AND CAREER OF JUDGES AND PROSECUTORS IN EUROPE: AUSTRIA, FRANCE, GERMANY, ITALY, THE NETHERLANDS, AND SPAIN* 128 (Giuseppe Di Federico ed., 2005).

96. See Benforado & Hanson, *supra* note 12, at 360.

student. This is for two reasons: i) there is no reason to believe that the average law student should be less situationist than the general population, thus a comparison with law students also provides information about the comparison with the general population; ii) unless one believes that lawyers, in general, are a category that sparks situationism in society as much as lawyers that aim to enter in the judiciary, we should observe a certain degree of self-selection among law students. For this reason, a meaningful comparison can be made between post-JDs that self-select in a judicial career and other law students.

We controlled whether our samples differed in terms of age and gender composition. We found no differences in terms of gender, and (not surprisingly) we found that judges-to-be were significantly older than law students. Note that the major difference between the educational curricula at a law school and an SSPL is that the former has an almost exclusive focus on learning positive law and legal reasoning. Conversely, the SSPL training has a stronger practical focus, which integrates theoretical learning with internships in courts and various practical courses (case law reading and drafting, legal counselling, mock trials, etc.).

B. Design

We used a 2×2 quasi-experimental design. Our independent variables were participant type (judges-to-be vs. law students) and character evidence (character evidence vs. non-character evidence). Respondents in each group were randomly assigned to one of the conditions (character evidence vs. non-character evidence).

C. Stimuli and Measures

All respondents were given a questionnaire divided into two parts. In the first part, we tested participants' personal tendencies to commit the FAE. To do so, we used the standard questionnaire on implicit theories of moral character.⁹⁷

Research indicates that a predictor of individual variations in the tendency to commit this error are implicit (or lay) theories.⁹⁸ Lay theories are not scientific theories nor are they necessarily consciously held. Yet, individuals often use them in an unconscious way to understand their own behavior and that of others.⁹⁹ Implicit theories are categorized as tending either more towards situationism or to dispositionism.¹⁰⁰ The more the implicit theory is situationist, the more it tends to explain human behavior

97. See Carol S. Dweck, Chi-yue Chiu & Ying-yi Hong, *Implicit Theories and Their Role in Judgments and Reactions: A World from Two Perspectives*, 6 PSYCHOL. INQUIRY 267, 269 (1995).

98. See Choi, Nisbett & Norenzayan, *supra* note 16, at 47; Bauman & Skitka, *supra* note 16, at 271, 276; Carol S. Dweck, *Implicit Theories*, in HANDBOOK OF THEORIES OF SOCIAL PSYCHOLOGY 52 (Paul A. M. Van Lange, Arie W. Kruglanski & E. Tory Higgins eds., SAGE Publications Ltd., vol. 2, 2012).

99. See Dweck, Chiu & Hong, *supra* note 97, at 268-69.

100. See *Id.*

in terms of situational, contextual factors. Conversely, the less it is situationist (i.e., the more it is dispositionist), the more it stresses the role of personality. Individuals holding a dispositionist lay theory are more inclined to commit the FAE than people adhering to situationist beliefs.¹⁰¹

Within the lay theories strand of research, studies on implicit theories of moral character are particularly relevant for the study of attributions in trial settings.¹⁰² Based on implicit theories of moral character, individuals can be categorized as either entity theorists or incremental theorists.¹⁰³ Entity theorists have a relatively higher propensity to believe that moral traits are non-malleable.¹⁰⁴ Entity theorists are therefore more prone to commit the FAE than incremental theorists.¹⁰⁵ In mock trials, for example, adherence to an entity theory of moral character has shown to predict a higher use of character evidence to establish guilt.¹⁰⁶ In a similar vein, Tam and co-authors found that entity theorists tend to hold stronger beliefs in criminal recidivism, dispositionally driven crime, and, as a result, impose higher punishments.¹⁰⁷ Furthermore, Tam and co-authors also found that higher punishments imposed by entity theorists were mediated by dispositionally oriented attributions.¹⁰⁸

The questionnaire on implicit theories of moral character was translated into Italian with the support of a professional translator (see the Appendix for the English version). The questionnaire is composed of the following three items: 1) "A person's moral character is something very basic about them, and it can't be changed much."; 2) "Whether a person is responsible or sincere or not is deeply ingrained in their personality. It cannot be changed very much."; 3) "There is not much that can be done to change a person's moral traits (e.g., conscientiousness, uprightness, and honesty)." Subjects were requested to express their agreement with each of the three statements on a 1 to 6-point scale and the answers were then combined in a scale to form a measure of implicit beliefs of moral character. The higher the score on this scale, the more the respondent can be seen as an entity theorist (i.e., has a higher tendency to commit the FAE). We observe that the scale had an excellent internal consistency (Cronbach's $\alpha = .84$).

101. See Choi, Nisbett & Norenzayan, *supra* note 16, at 47; Bauman & Skitka, *supra* note 16, at 271, 276; Dweck, *supra* note 98, at 52.

102. See Chiu, C.Y., et al., *Implicit Theories and Conceptions of Morality*, 73 J. PERSONALITY & SOC. PSYCHOL. 923, 936 (1997).

103. See *id.* at 923.

104. See *id.* at 937.

105. See Dweck, *supra* note 98, at 53; David H. Silveran, Stein-Kjetil Moe & Pål Iversen, *The Association Between Implicit Theories of Personality and the Attribution Process*, 41 SCANDINAVIAN J. PSYCHOL. 107, 110 (2000).

106. See Benjamin M. Gervay et al., *Differential Use of Person Information in Decisions about Guilt Versus Innocence: The Role of Implicit Theories*, 25 PERSONALITY & SOC. PSYCHOL. BULL. 17, 26 (1999).

107. See Kim-Pong Tam et al., *Belief about Immutability of Moral Characters and Punitiveness Toward Criminal Offenders*, 43 J. APPLIED SOC. PSYCHOL. 603, 608 (2013).

108. See *id.* at 608.

In the second part of the questionnaire, which contained the character evidence vs. non-character evidence treatment, respondents read a hypothetical tort law case in which a self-employed bricklayer was asked by a client to repair the roof of his house. Twelve years after the reparation took place, a violent whirlwind hit the roof, hereby damaging it. The client sued the bricklayer arguing that the damage would not have occurred had the bricklayer used due care to repair the roof. The bricklayer, however, denied not having taken due care. It was explained that evidence at trial showed that it was more than one hundred years ago that a whirlwind hit that area. In addition, the expert report established that it is possible for a badly repaired roof to last twelve years, but the expert was not able to establish whether the bricklayer exercised due care when repairing the roof. Important to note is that the strong and unforeseeable whirlwind was mentioned in the scenario to introduce a situational factor that could explain the accident. Respondents in the character evidence condition, in addition, received the information that on two previous occasions the bricklayer was found liable for having negligently repaired a roof. On both occasions, the bricklayer was said to have denied responsibility and to have shown little consideration for the loss of his clients. This is the typical situation in which, under Italian law, judges are expected to ignore character evidence.¹⁰⁹ In fact, given the low probative value attached to items of character evidence and the absence of other items of evidence against the plaintiff, the judge is expected to ignore this evidence.¹¹⁰ Participants in the no character evidence condition did not receive the information.

Thus, the second part of the questionnaire tests whether subjects are able to give character evidence its legally prescribed probative value and therefore correctly apply evidence rules that aim to limit attributional errors at trial. Note that given the specific features of this case, respondents have a relatively simple rule to follow (i.e., ignore character evidence). Thus, if they fail to correctly apply this rule in this occasion, it is plausible that they would not follow it in situations where the rule is less clear-cut, such as when they are called to give some weight to the item of evidence presented.

The dependent variables in each condition were the following: 1) we assessed respondents' attribution of the incident to situation vs. person by asking them to identify the cause/s of the accident on a 1-7 point scale (1, the sole cause of the accident was the violent whirlwind - 7, the sole cause of the accident was the conduct of the bricklayer); 2) participants were asked to imagine that they were judges presiding a case and to assign responsibility to the bricklayer for the accident. The answer had to be given on a 1-7 point scale (1, the bricklayer is not responsible at all - 7, the bricklayer is fully responsible)—this is our key dependent variable that tests the attribution of legal responsibility to the defendant; 3) we con-

109. See Grossi, *supra* note 7, at 224.

110. See *id.* at 224-25.

cluded the questionnaire by asking participants which percentage of the damages had to be compensated by the bricklayer.

We expected that respondents who received character evidence attribute more causality and responsibility to the plaintiff and require him to compensate a larger percentage of the harm compared to subjects who did not receive character evidence. Given the mixed findings of previous research on the relative performance of judges and laypeople in using inadmissible information,¹¹¹ we expect judges-to-be to be less affected by character evidence than law students. Building on previous research on implicit theories of moral character and trial decisions,¹¹² we expect that respondents' score on the implicit theories dimension predicts the attribution of causality, responsibility, and damages awards.

V. Results

Before testing our hypotheses, following the procedure described by Dweck and co-authors, we computed the proportion of entity and incremental theorists in both samples.¹¹³ We found that, respectively, 48% and 49% of the judges-to-be and law students are incremental theorists. This finding is in line with the general results according to which approximately 50% of the American participants are classified as incremental theorists.¹¹⁴ This indicates that judges-to-be have the same propensity to commit the FAE as participants of previous studies conducted in the United States. In line with previous literature on implicit theories, the remainder of the analysis used the implicit theories of moral character as a scale variable.¹¹⁵

General Linear Models were used to estimate the effect of the independent variables (participant type, character evidence, and implicit theories) on the dependent variables.

A. Manipulation Check

To verify whether our manipulation was successful, we asked participants on a 7-point Likert scale to what degree they believed that the defendant had a history of not repairing roofs properly (1, not at all - 7, very much). A General Linear Model with both our manipulation (character evidence and training) standardized scores on the implicit theories scale and their interaction as predictors revealed only a main effect for treatment, $F(1, 222) = 172.50$, $p < .001$, $\eta^2 = .44$, indicating that participants in the character evidence condition ($M = 5.14$, $SD = 1.38$) were more inclined to believe that the defendant had a history of not repairing roofs properly than participants in the no character evidence condition ($M = 2.65$, $SD = 1.49$). This indicated our manipulation was successful.

111. See Teichman & Zamir, *supra* note 14, at 671-73.

112. See Gervy et al., *supra* note 106, at 26; Tam et al., *supra* note 107, at 608.

113. See Dweck, Chiu & Hong, *supra* note 97, at 269.

114. See Silveran, Moe & Iversen, *supra* note 105, at 110.

115. See Dweck, Chiu & Hong, *supra* note 97, at 269.

B. Attribution of Causality

The same analysis as for the manipulation check was conducted for the dependent variable attribution of causality. Results revealed a main effect for character evidence, $F(1, 222) = 8.27$, $p < .005$, $\eta^2 = .04$, indicating that participants in the character evidence condition ($M = 3.10$, $SD = 1.16$) were more inclined to attribute the incident to the defendant's conduct (or less inclined to attribute to the situation) than participants in the no character evidence condition ($M = 2.63$, $SD = 1.15$). This analysis also reveals a significant main effect of type of participant, $F(1, 222) = 8.15$, $p = .005$, $\eta^2 = .04$, indicating that law students ($M = 3.05$, $SD = 1.17$) were more inclined to attribute the incident to the defendant's conduct (or less inclined to attribute to the situation) than judges-to-be ($M = 2.61$, $SD = 1.14$). The analysis revealed no other effects, except for a marginally significant main effect of implicit theories, $F(1, 222) = 2.67$, $p = .10$, $\eta^2 = .01$, indicating that the more participants are dispositionally inclined to attribute to dispositions, the more they did attribute the accident to the defendant's conduct. This effect, as well as the one relative to character evidence, did not differ between first- and second-year judges-to be.

Table 1: Mean Response (Causality, Responsibility, and Damages Award) by Condition and Total

Evidence Type	Judges-To-Be			Law Students		
	Character	Non-Character	Total	Character	Non-Character	Total
Causality	2.82	2.41	2.61	3.34	2.80	3.06
Responsibility	2.57	2.27	2.42	3.48	2.64	3.06
Damages Award	21.94	18.24	20.05	32.54	22.89	27.32

C. Responsibility

We repeated the analysis for the responsibility variable and observed a main effect for character evidence, $F(1, 222) = 9.07$, $p < .005$, $\eta^2 = .04$, suggesting that subjects in the character evidence condition ($M = 3.08$, $SD = 1.45$) had a tendency to judge the defendant to be more responsible than participants in the non-character evidence condition ($M = 2.48$, $SD = 1.32$). We also found a significant main effect of type of participant, $F(1, 222) = 12.00$, $p = .001$, $\eta^2 = .05$, suggesting that judges-to-be ($M = 2.42$, $SD = 1.34$) were less inclined to assign responsibility to the defendant than law students ($M = 3.05$, $SD = 1.42$). These main effects were, however, qualified by a marginally significant interaction, $F(1, 222) = 2.69$, $p = .10$, $\eta^2 = .01$. Closer inspection (pairwise comparisons with Bonferroni adjustments) showed that whereas law students receiving character evidence did assign more responsibility ($M = 3.45$, $SD = 1.35$) than law students who did not receive character evidence ($M = 2.64$, $SD = 1.37$), for judges-to-be this was not the case: respondents who received character evidence did not assign significantly more responsibility to the defendant ($M = 2.57$, $SD = 1.43$).

than respondents who did not receive character evidence ($M = 2.42$, $SD = 1.33$). We also find a significant, yet marginal, main effect of implicit theories, $F(1, 222) = 3.36$, $p < .10$, $\eta^2 = .01$, indicating the existence of a positive correlation between dispositionism and the attribution of responsibility. As above, a more fine-grained analysis showed that the effect of character evidence and implicit theories was not different between the first- and second-year judges-to-be.

D. Percentage of Damages Awarded

Lastly, the same analysis was conducted with the percentage of damages awarded as the dependent variable. Since a finding of responsibility is a precondition for requiring the defendant to compensate losses, we excluded from the sample the subjects that did not assign responsibility to the defendant (i.e., we took into account only those that answered the responsibility question with a number > 1). We find no significant main effect of treatment. In addition, the analysis also reveals the absence of a significant main effect of implicit theories.

VI. Discussion

Are judges less prone to commit the FAE in trial settings than laypeople? Since both the type of evidence presented at trial and personal inclinations can trigger the FAE, answering this question requires looking at each of these factors.

First, our data show that judges-to-be score similarly to law students on the implicit theories of moral character. Therefore, the hypothesis put forward by Benforado and Hanson,¹¹⁶ according to which people that embark on a judicial career tend to be more situationist than the rest of the population, is not supported by the data. Second, we find that for both groups (law students and judges-to-be) higher adherence to dispositionism is (marginally) associated with higher attribution of causality and responsibility to the plaintiff. In this connection, when read in conjunction with the studies on implicit theories, FAE and punishment,¹¹⁷ our result suggests that in the present study entity theorists may have attributed higher responsibility and damages because of a failure to correct their dispositional inferences for situational factors.

This result is consistent with previous studies which find that, like laypeople, judges rely on cognitive processes that trigger the FAE. For instance, American and Dutch judges have been found to rely on anchoring and adjustment,¹¹⁸ which is one of the mental processes that give rise

116. Benforado & Hanson, *supra* note 12, at 348–49.

117. Tam et al., *supra* note 107, at 608.

118. Jeffrey J. Rachlinski, Andrew J. Wistrich & Chris Guthrie, *Can Judges Make Reliable Numeric Judgments: Distorted Damages and Skewed Sentences*, 90 *IND. L.J.* 695, 730–31 (2015).

to the FAE.¹¹⁹ Feldman and co-authors find similar results with law students and experienced lawyers.¹²⁰ Our findings thus suggest that neither the training received by judges-to-be nor self-selection in the profession shields them fully from committing attributional errors in trial settings. In Part VIII, we elaborate on various debiasing strategies that could be adopted to improve the decision-making of judges and jurors.

In relation to the effect of character evidence on trial outcomes our results show that, contrary to law students, judges-to-be were better able to correctly apply the rule that limits the probative value of character evidence when expected to do so. This result holds true for the responsibility variable, but not for the causality variable. This difference in results can be explained by the fact that, under Italian law, attributing fault is a legal endeavour, while establishing causality is not necessarily so. To explain, the Italian legal system, as many other legal systems, distinguishes the notion of causality, i.e., the factual relation between two events, from the one of causation, i.e., a legal concept subject to various rules, such as the requirement that a factor is a “necessary” cause of an accident.¹²¹ Our questionnaire asked participants to determine causality, not causation. Also, in the questionnaire, we stressed the legal relevance of the responsibility question by asking participants to imagine that they were judges presiding over a case. This framing was instead not present in the causality question.¹²² In line with previous research,¹²³ this finding suggests that judges-to-be perform better than law students when making legal decisions, but not when they are merely asked to attribute causality for events.

The result is consistent with the literature on the effect of character evidence on lay adjudicators, which shows that laypeople’s trial decisions are affected by knowledge of prior convictions.¹²⁴ In addition, this result is also consistent with the evidence indicating that American administrative law judges are able to disregard inadmissible information.¹²⁵ Similarly, this study is in line with the recent finding by Rachlinski and co-authors that judges, regardless of years of experience in adjudication, are able to disregard hindsight information when expected to do so.¹²⁶ Our results suggest that the employment of judges may reduce the influence of the FAE on trial outcomes, at least when this error is due to character evidence. What can explain this result? Given that we found no differences in terms of implicit theories among the two groups, which excludes self-

119. RICHARD NISBETT & LEE ROSS, HUMAN INFERENCE: STRATEGIES AND SHORTCOMINGS OF SOCIAL JUDGMENT 41, 123 (1980).

120. Yuval Feldman, Amos Schurr & Doron Teichman, *Anchoring Legal Standards*, 13 J. EMPIRICAL LEGAL STUD. 298, 320 (2016).

121. For a review, see Marta Infantino & Eleni Zervogianni, *The European Ways to Causation*, in CAUSATION IN EUROPEAN TORT LAW 85, 94-95 (Marta Infantino & Eleni Zervogianni eds., Cambridge Univ. Press, 2017).

122. See the Appendix, *infra*, for the entire questionnaire.

123. See Rachlinski, Guthrie & Wistrich, *supra* note 65, at 92.

124. Devine & Caughlin, *supra* note 73, at 116.

125. Guthrie, Rachlinski & Wistrich, *supra* note 69, at 1516-17.

126. See Rachlinski, Guthrie & Wistrich, *supra* note 65, at 92.

selection as an explanation, it is plausible that our results were due to differences in familiarity with handling cases at trial between law students and judges-to-be. Indeed, it is plausible that, because of their greater experience, judges-to-be perform better than law students in correctly applying rules limiting the probative value of character evidence.¹²⁷

These results are surprising. Indeed, they are somewhat difficult to reconcile with part of the previous literature that finds that even professional judges with many years of professional experience are not always able to handle inadmissible evidence as expected.¹²⁸ Yet, a common finding in this literature is that, when it comes to ignoring inadmissible evidence, the years of experience in the judiciary are irrelevant in predicting performance.¹²⁹ It can, therefore, be the case that there are *types* of evidence that are easy to ignore after having received little training in adjudication; while others are very difficult to ignore, regardless of experience. Yet, on the basis of current data, it is difficult to identify which types of character evidence are more easily ignored. Further research is needed in this direction. If little expertise is sufficient to ignore some types of character evidence but not others, one could conceive tailoring evidence law based on the specific type of evidence considered.

Our findings contribute to the transatlantic debate on the relative advantages of American evidence law and continental Europe evidence law in improving the accuracy of trial decisions. In particular, they indicate that even a softer regulation of character evidence than the one adopted under American law may sometimes be effective in steering adjudicators' decisions in the right direction. Furthermore, as discussed above, Italian law does not totally forbid the use of character evidence, but it requires the judge to ignore it when it is the only item of evidence available. Judges-to-be have shown to be able to act upon this prescription, at least when assigning responsibility. Overall, these findings offer some support to the idea, often held in legal scholarship, that a ban on character evidence might not always be necessary in legal systems that employ judges.¹³⁰ Thus, the institutional setups put forward by legal systems on the two sides of the Atlantic seem to be well calibrated.¹³¹ The almost exclusive employment of (professional and non-professional) judges in European countries may justify soft regulation of character evidence, but similar rules may not be warranted when decisions are made by jurors.

127. On the role of experience in improving judicial decision-making see Guthrie, Rachlinski & Wistrich, *supra* note 69, at 1483-86.

128. Wallace & Kasson, *supra* note 84, at 156; Wistrich, Guthrie & Rachlinski, *supra* note 13, at 1259.

129. Rachlinski, Guthrie & Wistrich, *supra* note 65, at 87; Wallace & Kasson, *supra* note 84, at 153; Wistrich, Guthrie & Rachlinski, *supra* note 13, at 1302, 1307.

130. See FED. JUDICIAL CTR., *supra* note 13, at 64; Levin & Cohen, *supra* note 13, at 916; Sheldon & Murray, *supra* note 8, at 227-28.

131. Note that European countries may gain from admitting character evidence at trial because this type of evidence can have some probative value. Thus, if well used, it can improve the accuracy of trial decision. See Sheldon & Murray, *supra* note 8, at 228.

VII. Limitations

Despite our efforts, the present work has various limitations. A first limitation, common to all vignette experiments, is that the behavioural responses of our subjects were given in a hypothetical scenario. This methodology does not replicate the emotional and institutional incentives that factfinders receive in real life settings, and therefore our results have only a limited external validity. Yet, isolating the effects of the FAE on judicial decision-making is already a challenging task in artificial settings. Studying this phenomenon in the field would be even more difficult.

Second, our subjects were law students and judges-to-be that were approached in the same city. Despite the fact that the two groups are similar on many levels, they were different to each other regarding the training they had received and their professional aspirations. That being said, it is possible that our result was driven by another demographic factor. In this connection, a clear difference between the two samples was age. In line with academic practice, we, therefore, conducted our analysis controlling for age. Our results were replicated. We also controlled our results for gender and obtained results in line with the previous research.

VIII. Implications for the Court System

This study indicates that, as laypeople, judges who have a propensity to commit attributional errors are likely to commit them in trial settings as well. What can be done about this? There is not a simple answer to this question. However, the large psychological literature on the FAE offers some guidance. Building on this literature we discuss some strategies that policymakers, judges, and jurors can take to reduce attributional errors in trial decisions.

A. Make Judges and Jurors Count

Evidence indicates that accountability can reduce the tendency to infer dispositional traits from observed behaviors.¹³² In particular, a study shows that accountability induces individuals “to process social information in more analytic and complex ways, and that can check judgmental biases such as . . . the fundamental attribution error.”¹³³ Making judges and jurors accountable for their decisions, for instance, by strengthening the power of appellate courts to revise decisions made by lower courts may thus reduce attributional errors. In countries that limit the type of cases that can go to appeal,¹³⁴ this could be done, for instance, by broadening

132. See Philip E. Tetlock, *Accountability: A Social Check of the Fundamental Attribution Error*, 48 SOC. PSYCHOL. Q. 227, 233 (1985).

133. *Id.* at 233.

134. This happens, for instance, in the Supreme Court of the United States, where only a fraction of the cases appealed are decided. See *The Last Word: Courts of Appeals Cases You Should Know*, US COURTS, <http://www.uscourts.gov/educational-resources/educational-activities/last-word-courts-appeals-cases-you-should-know> [https://perma.cc/CN62-QXPR] (last visited Aug. 21, 2018).

the scope of the cases that can be appealed. Another strategy to implement could be to require judges to motivate their decisions more thoroughly, thus increasing the scrutiny of the public and of higher courts (in case of an appeal), on the thoughts that lead to a decision.

B. Discussing in the Courtroom

Empirical literature shows that group discussion reduces peoples' tendency to make dispositionally oriented attributions.¹³⁵ It is possible that making judges and juries discuss factual aspects of the case before the decision is made reduces the influence of the FAE on trial outcomes.¹³⁶ Jury trials and collegial court proceedings already allow and encourage such discussions, and, as such, the risk of attributional errors is likely higher when decisions are made by monocratic courts. In several European legal systems monocratic courts are quite diffuse, posing a risk of attributional errors in trial settings.¹³⁷ The widespread employment of juries can be a comparative advantage for the American legal system over continental Europe ones.

Nonetheless, trials by judges may offer a layer of safeguard against inaccurate attributions that tend not to be present in trials by juries—namely, the power of judges to actively participate in the discussion at trial. This power is granted to judges in many legal systems in continental Europe.¹³⁸ For instance, Italian law allows judges both to summon/examine parties and order fact-finding procedures.¹³⁹ When these powers are granted, judges' participation in trials tends to be less passive than that of jurors in jury systems.¹⁴⁰ It can be that systems that allow and incentivize judges to take an active part in hearings may reduce the effect of the FAE on trial outcomes. This would occur regardless of whether the court is monocratic or collegial. A possible strategy against the FAE would be to widen or incentivize the scope for active participation of judges (and maybe juries) in trial discussions.

C. Writing in Third Person

Recent studies on the FAE show that self-distancing can reduce the

135. Edward F. Wright, C. A. Elizabeth Lütis & Scott D. Christie, *Does Group Discussion Facilitate the Use of Consensus Information in Making Causal Attributions?*, 59 J. PERSONALITY & SOC. PSYCHOL. 261, 268 (1990); Edward F. Wright & Gary L. Wells, *Does Group Discussion Attenuate the Dispositional Bias?*, 15 J. APPLIED SOC. PSYCHOL. 531, 542 (1985).

136. See Wright & Wells, *supra* note 135, at 544.

137. See, e.g., ANDREA LUGO, *MANUALE DI DIRITTO PROCESSUALE CIVILE* 69-70 (Claudio De Angelis ed., 18th ed. 2012); Loïc Cadiet, *Introduction to French Civil Justice System and Civil Procedural Law*, 28 RITSUMEIKAN L. REV. 331, 333-34 (2011) (Japan).

138. On differences between the U.S. legal system and continental European legal systems in terms of the power of the judge to intervene at trial, see Grossi, *supra* note 7, at 214-15. See generally John A. Jolowicz, *Adversarial and Inquisitorial Models of Civil Procedure*, 52 INT'L & COMP. L.Q. 281 (2003).

139. FRANCESCO P. LUISO, *DIRITTO PROCESSUALE CIVILE: IL PROCESSO DI COGNIZIONE* 95-96 and 165-166 (9th ed., vol. 2, Giuffrè Editore, 2017).

140. See Grossi, *supra* note 7, at 215.

human tendency to make dispositionally oriented attributions.¹⁴¹ In this literature, self-distancing is defined as “the process of taking a step back from one’s own thoughts and looking at one’s thoughts and experiences as if one were another.”¹⁴² Thus, according to these studies, when an observer is called to judge the behavior of a third party, the more the former takes a step back to distance himself from his own thoughts, the less his judgment will tend to be dispositionally oriented.¹⁴³

Research indicates that a way to implement self-distancing that reduces the tendency to make dispositionally oriented judgments is writing in third person.¹⁴⁴ In the context of a trial, judges could write their decisions using the formula “the court” instead of “I.”

In this respect, there can be important differences between legal traditions. In several European legal systems, judges write their decisions referring to themselves with expressions such as “the court.”¹⁴⁵ The U.S. practice tends instead to be more informal, allowing the use of the first person.¹⁴⁶ It is possible that this informal writing style facilitates the commission of attributional errors at trial, and there might be a reason to limit its use.¹⁴⁷

We stress that while these three sets of policies could help to reduce unwarranted errors in the courtroom, adopting them may not necessarily be the best policy option for a least two reasons. First, empirical evidence indicates solely that accountability, group discussion, and self-distancing induce individuals to make less dispositionally oriented judgments, but it does not show that these judgments are accurate. There is still a risk that the attributional error is overcorrected or under-corrected.

Second, it is important to stress that these policies may also entail costs that may not justify their adoption, despite their potential benefits. For instance, increasing accountability, by widening the scope of appellate revision or asking judges to write longer decisions, may make trials longer and increase the administrative costs of proceedings. Similarly, the choice

141. Ryan H. Bremner, *Self Distancing and Human Reflection: Overcoming Bias in Judgment and Emotional Reasoning* 26 (2013) (Ph.D. dissertation, Univ. of Michigan), https://deepblue.lib.umich.edu/bitstream/handle/2027.42/99872/bremner_1.pdf?sequence=1 [<https://perma.cc/SE5J-HY3S>].

142. *Id.* at 3.

143. *See, e.g., id.* at 10.

144. *See id.* at 26.

145. With regards to decisions of the Corte di Cassazione (the Italian Supreme Court) see, for example, CORTE SUPREMA DI CASSAZIONE, <http://www.cortedicassazione.it> [<https://perma.cc/7DT7-54HX>] (last visited Aug. 21, 2018). With regards to the decisions of Cour de Cassation (the French Supreme Court) see COUR DE CASSATION, <http://www.courdecassation.fr> [<https://perma.cc/LF5V-KRDB>] (last visited Aug. 21, 2018).

146. Note the use of “I hold” and “I find” in opinions of various US courts. *US Case Law*, JUSTIA US LAW, <https://law.justia.com/cases/> [<https://perma.cc/2RYE-QAGH>] (last visited Mar. 13, 2019).

147. Of course, the choice of the best writing style in judicial decision making may entail taking into account a wider set of considerations than the possibility of committing attributional errors alone, and thus there is not necessarily a clear case to adopt formal writing in courts. On judicial writing style, see generally Richard A. Posner, *Judges’ Writing Styles (And Do They Matter?)*, 62 U. CHI. L. REV. 1421 (1995).

of the best writing style in judicial decision making may entail accounting for a wider set of considerations than the possibility to commit attributional errors alone, and thus there is not necessarily a clear case to adopt formal writing in courts. Thus, countries need to balance different interests in addressing faulty attributions at trial, and this balancing may well indicate that the best policy option is to not address faulty attributions. Further research is therefore needed before these policies are implemented.

Conclusion

Attributing fault is a key but challenging aspect of tort trials. A wealth of psychological research shows that humans are prone to make systematic errors in performing this task. Is there a remedy for this problem? Legal systems in the United States and continental Europe adopt diametrically opposed remedies to address this issue. European legal systems rely almost exclusively on judges to perform fact-finding, assuming that they make fewer mistakes than laypeople in attributing responsibility at trial. Under American law, instead, fact-finding is delegated to jurors, but some types of evidence are made inadmissible in trials to protect jurors from potentially biasing information, such as character evidence. Legal scholars debate on which of these two systems is better at reducing errors in fact-finding.

In this Article, we provide empirical evidence on the relative performance of these two systems via a vignette study. Our findings indicate that, while the European approach to character evidence is not effective in preventing laypeople (i.e., jurors) from committing errors in the attribution of responsibility at trial, European rules are effective when fact-finding is performed by judges. Therefore, the American evidence law's approach to limit the admissibility of character evidence at trial seems appropriate when fact-finding is performed by jurors. However, our results also indicate that neither of the two approaches can fully prevent factfinders' errors in attributing responsibility. In particular, we find that when these errors are due to unconscious beliefs held by factfinders, both judges' and jurors' decisions reflect the propensity of the factfinder to commit errors at trial. We, therefore, conclude by proposing a number of policies that could reduce errors in the attribution of fault in the courtroom.

Appendix: Materials

This appendix presents the text of the hypothetical case that we report in this article. Variations present in each condition are labelled. The demographic questions asked to participants:

Age: ____

Gender: M F

You are being asked to participate in a study about *decision making*.

You will read statements and will be asked to answer questions related to these statements. Subsequently, you will read a case and then you will be asked to answer questions related to the case.

All responses are anonymous. In accordance with privacy law (Decreto Legislativo n. 196/2003), the data gathered in this study will be analysed and used only in an aggregate form and only for scientific purposes.

Turn the page to start the study.

Please read the following statements and answer the questions on a 1 to 6 degree scale (1 strongly disagree - 6 strongly agree). Please provide your answer by circling a number:

1) A person's moral character is something very basic about them, and it can't be changed much.

Strongly disagree 1----2----3----4----5----6 Strongly agree

2) Whether a person is responsible or sincere or not is deeply ingrained in their personality. It cannot be changed very much.

Strongly disagree 1----2----3----4----5----6 Strongly agree

3) There is not much that can be done to change a person's moral traits (e.g., conscientiousness, uprightness, and honesty).

Strongly disagree 1----2----3----4----5----6 Strongly agree

Please read the following story very carefully before you answer the questions

Mr X is a self-employed bricklayer who works as an independent contractor specialized in the restoration of house roofs.

- **Character evidence condition:** On two occasions, two of the roofs that Mr X has repaired collapse around 15 years after the reparation took place. The accident causes substantial losses to Mr X's clients. Mr X's clients complain and claim that Mr X has not taken the appropriate amount of care when repairing the roof thus putting their lives and properties at risk. On both occasions, Mr X denies not having done his work properly and replies to his clients that he does not care about their health or property, that it is probably their fault and that he will not pay any damages. In both cases, the victims sue Mr X and the evidence at trial reveals major flaws in the way in which the roof had been repaired due to the carelessness with which the job had been executed. Thus, in both trials, Mr X is proven negligent and is ordered to pay damages.
- **No character evidence condition:** --NO TEXT IS PROVIDED --

One day, Mr X is asked by Mr Y to repair his tiled house roof. 12 years after Mr X had repaired the roof, a violent whirlwind hits the roof. When hit by the whirlwind the roof is severely damaged. In the state in which the accident occurred house owners are not required to insure their house and independent contractors are not required to buy liability insurance. In the case above, neither Mr X nor Mr Y were insured. Because Mr Y believes that flaws in the roof reparation made the roof more vulnerable to the whirlwind, he decides to sue Mr X for damages.

At the trial, Mr Y argues that Mr X did not exercise due care when repairing the roof and that the roof would not have been damaged had it been properly repaired. Mr X denies not having taken due care. In addition, Mr X argues that he cannot be held liable for the accident because the whirlwind was so violent that it would have damaged the roof regardless of how much care was exercised when repairing it. Meteorological data show that it was the first time in the last century that a whirlwind hit that area. The expert report establishes that it is possible for a badly repaired roof to last 12 years. However, in the present case, the expert report is not able to establish whether Mr X exercised due care when repairing the roof.

After you have carefully read the story above, please answer the following questions:

- 1) To what extent do you think that Mr X has a history of not repairing roofs properly? Please answer on a 1 to 7 degree scale (circling a number).

Not at all	1-----2-----3-----4-----5-----6-----7	Very much
------------	---------------------------------------	-----------

- 2) What do you personally think was/were the cause/s of the accident? Please answer on a 1 to 7 degree scale (circling a number).

The only cause of the accident was the violent whirlwind	1-----2-----3-----4-----5-----6-----7	The only cause of the accident was the conduct of Mr X
--	---------------------------------------	--

- 3) If you were the judge presiding over this case, to what extent would you rule that Mr X is responsible for the accident? Please answer on a 1 to 7 degree scale (circling a number).

Mr X is not responsible at all	1-----2-----3-----4-----5-----6-----7	Mr X is fully responsible
--------------------------------	---------------------------------------	---------------------------

- 4) If you were the judge presiding over this case, which percentage of the damage would you require Mr X to pay? Answer this question indicating a percentage.

0% Mr X does not compensate the loss	0% _____ 100%	100% Mr X compensates the full loss
--------------------------------------	---------------	-------------------------------------

