

Methodology in Legal Research

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1. Introduction

During the last 20 years empirical research methods have become increasingly central to the landscape of legal scholarship.¹ Prior to that time the field of legal scholarship has been most heavily dominated by normative analyses of the law, i.e. by 'black letter law'.² Such doctrinal analyses involve efforts to understand the best balance of rights and obligations under the framework defined by law. Their inspiration is drawn from moral, legal and political philosophy. They build their analysis around questions of what ought to be.

Increasingly empirical research methods have been used to address a variety of legal questions. This paper embraces the idea of evidence informed law. One widespread use of data has been to describe facts or identify empirical associations. There are so many of these applications of empirical methods to the task of establishing legal facts in the United States alone that they cannot all be reviewed. As Diamond & Mueller note in 2008 nearly half of American law review articles now include some empirical content.³

Let me give one example that involves psychology – future risk assessment.⁴ The legal system relies on predictions about people's likely future behavior at many points in the system: pretrial detention; sentencing; parole and probation; etc. And it has been used with a variety of special populations, including juveniles; the mentally ill; and sexual predators. Such risk assessment has traditionally been made by legal actors based upon their intuitions. A judge would look at a defendant, hear about their conduct, and make an inference about their character and likelihood of committing future crimes. However, when compared to predictions based upon such intuitions actuarial models are found to be more accurate. Consequently their use has proliferated in the American legal system. Such models have the virtue of more accurately identifying the likelihood of future dangerousness, meaning that fewer people who would be nonviolent are incarcerated, and that fewer people who would be violent are let free. A key reason to use such quantitative methods is that they are better able to predict future behavior and as a consequence the many points in the system at which judgments are made – pre-trial detention; sentencing; parole – are better able to enact justice for both the innocent and the guilty.

The focus by social scientists upon helping to identify and use facts in ways that produce more accurate decisions fits well with the argument that the aims of justice are best served when they are based upon accurate factual information. Accuracy, in turn is enhanced by the use of empirical methods. Facts are sought

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1 J. Monahan & L. Walker, 'Twenty-Five Years of Social Science in Law', (2011) 35 *Law and Human Behavior*, no. 1, pp. 72-82. M.J. Saks & B.A. Spellman, 'Introduction', in *The psychological foundations of evidence law* (2016).

2 S.S. Diamond & P. Mueller, 'Empirical Legal Scholarship in Law Reviews', (2010) 6 *Annual Review of Law and Social Science*, <<https://doi.org/10.1146/annurev-lawsocsci-102209-152848>>, pp. 581-599.

3 Ibid.

4 C.A. Mamalian, *State of the science of pretrial risk assessment*, National Institute of Justice. Bureau of Justice Assistance (2011). J. Simon, 'Reversal of Fortune: The Resurgence of Individual Risk Assessment in Criminal Justice', (2005) 1 *Annual Review of Law and Social Science*, <<https://doi.org/10.1146/annurev.lawsocsci.1.041604.120006>>, pp. 397-421. J.L. Skeem & J. Monahan, 'Current directions in violence risk assessment', (2011) 20 *Current Directions in Psychological Science*, no. 1, DOI: 10.1177/0963721410397271, pp. 38-42. All of the social sciences make useful contributions to evidence informed law. However, because my own background is in psychology I will draw most heavily from examples in that field.

that can guide the application of normative legal principles. Accurate facts plus good legal rules lead to substantive justice. This is the normative framework of right and wrong defined by traditional legal analysis.

Risk analysis is a nice example of the benefits of empiricism because studies suggest that the use of empirical methods to assess future dangerousness is more accurate than is the use of human intuition. It is better to use a formula when making a legal decision that involves estimates of someone's likely future conduct than it is to rely upon the impressions of judges or prosecutors.⁵

This same idea is found in other areas of law. Research on how to design line up procedures had led to procedures through which a witness is more likely to identify the true criminal and less likely to identify an innocent person. Studies of interrogation procedures have identified models for police interrogation that are more likely to lead to confessions among those actually guilty and less likely to motivate innocent people to falsely confess. Evidence informed procedures are more accurate.

This approach to the use of research in law illustrates the virtues of empiricism, but it also highlights a limit. The types of models outlined are atheoretical. They reflect the virtues and drawbacks of big data because they use whatever is predictive in the models, but lack any models about human nature. For example, with future behavior there is no model explaining why people are violent. They are predictive, but not explanatory. In the case of risk analysis the goal is to accurately predict future behavior, not to explain or test theories about why such behavior does or does not occur. Empirical models have become increasingly popular with the increasing availability of large data sets and the growth in familiarity both with quantitative regression models⁶ and qualitative methods⁷ for research.

Empirical research has value and it is much better to base policy on evidence than on hunches. In this article it is suggested that the benefits of an empirical approach are enhanced not simply by the use of data, but in particular by drawing upon the power of social science theories. A number of social science theories might potentially be relevant. Because my own background is in psychology, I focus on psychological theories. These theories allow the law to expand the framework within which issues of law are considered. It is in drawing upon theoretically based social science models of human nature that the law has been especially weak and has a great deal to gain, and not just in the widespread use of research instead of intuition, hunch and supposition.

Drawing upon social science theory allows us to imagine that factors not currently within the system could matter and test whether that is in fact the case. It provides a method of identifying new issues and also a method for testing their importance. It is this combination of new possibilities and a mechanism for verifying or falsifying their importance that I suggest most compellingly illustrates what empiricism can contribute that is of the most value to the law. Social science theory can suggest new possibilities for law and can show that they have value in ways that move discussions about law and legal policy forward. This is not to suggest that current law is without a theoretical framework. The implicit and often explicit model for the design of legal institutions today is economic theory. This paper will contrast the implications of that theoretical framework to one drawing upon social science and, in particular, psychology.

2. Institutional design as a general framework

Increasingly during the last several decades legal scholars have adopted an institutional design approach in which laws and the policies and practices of legal authorities are examined through a consideration of their impact upon the goals of the legal system. This approach began with theoretical economic models which contain two important elements: a model of the assumed motivations underlying human behavior and an argument that we ought to evaluate rules based upon their impact on people, either individually or in the

5 J.L. Skeem & J. Monahan, 'Current directions in violence risk assessment', (2011) 20 *Current Directions in Psychological Science*, no. 1, DOI: 10.1177/0963721410397271, pp. 38-42; C.A. Mamalian, *State of the science of pretrial risk assessment*, National Institute of Justice. Bureau of Justice Assistance (2011).

6 L. Epstein & A.D. Martin, *An introduction to empirical legal research* (2014).

7 J. Conley & J.C. Moriarty, *Scientific and expert evidence*; R. Lawless et al., *Empirical methods in law* (2016); C. Robson & K. McCartan, *Real world research* (2016).

aggregate. The institutional design element of this development lies in the argument that authorities can and should design rules through an understanding of their impact on society.

Initially the institutional design approach was not empirical. Instead policies were designed based upon assumptions about human nature derived from economic theory. But the goal was to use models to design institutions to achieve goals. Behavioral economics extends the original law and economics framework by arguing that empirical research can be used to assess connections between rules and their societal consequences. By treating these connections as empirical propositions that can be tested, behavioral economics brings economics and other social sciences closer together, at least in terms of a focus on empirical research. In the case of psychology and behavioral economics the fields are also united due to their focus on studying micro-level human behavior. Macro-level models connect economics to the social context issues more central to sociology.

A broader goal for empirical research is to define different ways in which the legal system might operate and compare them empirically. We can treat the entire legal system as a social system involving rules, authorities and institutions. That system can then be evaluated in terms of the behavioral outcomes resulting from the manner in which it is designed and functions. This includes the structure of the laws and the policies and practices of legal authorities. Such an institutional design approach is familiar to scholars in organizational psychology or organizational behavior who are accustomed to treating factories or other work organizations as social systems and designing them to maximize productivity.⁸ This approach is easier, at least within the United States, in the case of management because there is a relatively unambiguous goal: productivity and from it profit for the owners. This is not to say that there is common agreement about this goal for management, just that there is more consensus than exists in defining the goals of the legal system. The legal system has relatively speaking a number of competing goals and at least some of them, such as justice, are challenging to quantify.

How about extending organizational design approaches to law and creating a similar approach? To do so we need to define behavioral goals for the legal system and develop rules and institutions through which we might achieve those goals. This requires us to define the objectives of the legal system. And, we need to identify metrics that can operationalize the assessment of these goals.

This effort is consistent with discussions of legal institutions by classic social theorists like Max Weber.⁹ Weber distinguishes two questions. One is normative. It is whether the rules and authorities in a given system legal system ought to be obeyed. This is a question for legal philosophers in answering which they define the conditions of a just system and argue that if authority is just people should accept and obey it. So, if for example, leaders follow the law then they are entitled to deference.

The second question is whether people will in fact obey a rule or decision made by a legal authority. This is a social science question and requires an empirical examination. The question can be whether people do obey laws. It can further examine the conditions under which they will or will not defer to authorities. In either case the question is what elements in the actions of legal authorities in the creation and/or implementation of laws encourage or undermine public behavior in relationship to those laws.

Implicit in Weber's work is the assumption that compliance is the core issue with authority, a view that remains widespread within legal scholarship. It is important to recognize that a focus on compliance is only one of the many goals that might be important for a legal system. As noted it is the multiplicity of potentially important goals that makes empirical research about the legal system difficult to design. However, there is widespread recognition that obtaining compliance is a core goal of law and legal authorities so it will be used as a focus for this analysis.

Either of these Weberian questions can underlie an institutional design approach. Each has goals and seeks to design the system to achieve those goals. One set of goals are philosophical. That model seeks to define a system so that legal philosophers evaluate its institutions and rules as being deserving of popular

8 D. Boddy, *Management: An Introduction* (2002); R. Kanigel, *The One Best Way: Frederick Winslow Taylor and the Enigma of Efficiency* (1997); W. Kiechel, 'The management century', (2012) 90 *Harvard Business Review*, November, pp. 62-75.

9 T.R. Tyler, 'Psychological perspectives on legitimacy and legitimation', (2006) 57 *Annual Review of Psychology*, pp. 375-400; M. Weber, *Economy and Society* (1968).

deference. The other set of goals focus more on what members of the community are actually doing in their everyday lives. Are they following rules and/or deferring to legal authorities? This paper focuses upon the latter – empirical – model. This is consistent with an increasing focus in legal scholarship on the empirical examination of the basis of effective legal authority.

Empirical institutional design argues that legal institutions should be designed to achieve the system's desired goals. It is a model of proactive law because it suggests that you can design institutions to achieve desirable outcomes. You can do so in advance of events. In an ideal world, if you design well, contracts are well designed and therefore seldom broken. Laws are optimal and likewise seldom broken. This contrasts with the classic approach in which the law is reactive and comes into play after a crime has occurred or a contract is broken. Of course such design has been based upon assumptions, not evidence. The early law and economics movement depended heavily upon assumptions about how people would behave, rather than upon empirical examinations of what people were doing in their everyday lives. However, current scholarship is more likely to view these issues as testable and to contrast the capacity of different models to describe people's behavior.

The second aspect of this approach therefore is evidence informed law. Authorities do not assume that they know what works. Rather researchers determine if institutions and authorities are achieving system goals by empirical research. One type of research is experimental; another is non-experimental. Both involve identifying different sets of legal rules and observing how they differentially influence subsequent behavior. In an experimental situation people can be randomly assigned to treatments, while in non-experimental situations this is not possible.¹⁰ In either case the goal is to use research to test the impact of variations in the rules and the decisions made by legal authorities on public law-related behaviors.

To begin a consideration of evidence informed law we can focus upon what has already been noted to be the traditionally agreed upon goal of law which is to bring people's behavior into line with legal rules and the decisions of legal authorities: i.e., to gain compliance. Behavioral economics begins with the recognition that compliance is the desirable goal for law. Drawing upon economic theory the means for achieving this behavior are traditionally defined as instrumental, i.e. behavior is changed by changing the rewards or punishments that people think are likely to flow from engaging in particular types of behavior. In the area of law that is primarily through the threat or use of sanctions. It can also potentially involve incentives, i.e. rewards for engaging in desired behaviors. This approach has not been particularly concerned with attitudes and values. This approach will be referred to as coercive. It is theory based because it is built upon economic models.

In contrast to an economic model social science approaches have typically emphasized the importance of considering a broader model for the mental frameworks that determine behavior. Their models include values, including social norms, moral values and legitimacy.¹¹ Hence, social science models identify factors that have received less attention in legal scholarship than have the risk assessments underlying deterrence. They are also theory based, drawing upon the social sciences. But, these theoretical frameworks have been less central to the past design of legal institutions.

In addition, social science models broaden the goals for the legal system beyond the traditional goal of compliance to voluntary acceptance.¹² Voluntary acceptance is deference not rooted in instrumental concerns, but rather in values. A key concept in these analyses is perceived legitimacy.¹³ That is the belief that laws are appropriate and people ought to accept and follow them. Hence, a legitimacy based model is distinct in two ways. First, it offers an alternative perspective on why people obey the law. Second, it suggests an alternative goal to compliance. That goal is voluntary and willing acceptance. Hence, this is a consensual model.

10 D.P. Green & D.R. Thorley, 'Field experimentation and the study of law and policy', (2014) 10 *Annual Review of Law and Social Science*, pp. 53-72.

11 T.R. Tyler, *Why people obey the law* (2006); T.R. Tyler, 'Psychological perspectives on legitimacy and legitimation', (2006) 57 *Annual Review of Psychology*, pp. 375-400.

12 T.R. Tyler et al., 'Street stops and police legitimacy', (2014) 11 *Journal of Empirical Legal Studies*, no. 4, pp. 751-785; T.R. Tyler & J. Jackson, 'Popular legitimacy and the exercise of legal authority: Motivating compliance, cooperation and engagement', (2014) 20 *Psychology, Public Policy, and Law*, no. 1, pp. 78-95.

13 T.R. Tyler, *Why people obey the law* (2006); T.R. Tyler, 'Psychological perspectives on legitimacy and legitimation', (2006) 57 *Annual Review of Psychology*, pp. 375-400.

This analysis will focus in particular on popular legitimacy. The core idea of legitimacy as a subjective value is the public view that the police/courts/law are entitled to exercise authority to maintain social order, manage conflicts among community members and to decide how to best solve problems in their communities.¹⁴ It is typically operationalized using three indicators: trust and confidence in the authority; willingness to defer; and the perception of shared values (normative alignment).¹⁵ Legitimacy is a central value for the legal system because it is linked to legal authorities. Other values – social norms and moral values – are also important determinants of behavior, but can be counter to legal authority. For example, moral values have long been a reason to disobey some laws.

The recognition of these two perspectives provides two ways of thinking about the relationship between people and legal authority: coercive (instrumental) and consensual (value-based).¹⁶ The coercive approach focuses on compliance via the use of incentives and sanctions. The consensual approach is concerned with voluntary acceptance achieved through legitimacy.¹⁷ Put another way the coercive model focuses upon the influence of external contingencies on behavior, while the consensual model examines the influence of internal values on behavior. In this sense voluntary behavior is defined as behavior occurring due to internal values, rather than external contingencies.

In this case the role of empirical research is not to exist within a normative framework, as occurs with the application of criminal and civil laws. The role of empirical research is to help us choose between theoretically derived conceptions of how the legal system should be structured. What should its goals be and what mechanisms should be emphasized in achieving those goals? These are empirical issues and can be addressed using research. They are testable and falsifiable.

Summary. What factors shape compliance? As noted the literature on compliance identifies four bodies of non-instrumental influence upon behavior: sanctions, norms, moral values and legitimacy. Sanctions involve the risk of punishment. Norms refer to shared values in a community. People do not violate norms when they fear disapproval from others. Moral values are judgments about right and wrong. People are motivated to adhere to their own moral values. Legitimacy is responsibility and obligation to obey authorities. People defer to authorities when they think they are entitled to make decisions. All of these factors reflect reasons that people might obey or disobey laws.

3. Everyday crime

We can use everyday crime to assess the virtues of a broader model of the psychology underlying compliance. I study everyday compliance with the law.¹⁸ Underlying my analysis is that empirical finding that the influence of sanctions is limited. In the area of everyday compliance reviews of deterrence research have concluded that the relationship between risk judgments and crime is modest to negligible¹⁹ and that the perceived certainty of punishment plays virtually no role in explaining deviant/criminal conduct.²⁰ According to Piquero et al.,²¹ a review of the literature results in ‘some studies finding that punishment weakens compliance, some finding that sanctions have no effect on compliance, and some finding that the effect of sanctions depends on moderating factors’.²² The effects of deterrence, in other words, exist, but are weak.

14 T.R. Tyler, ‘Psychological perspectives on legitimacy and legitimation’, (2006) 57 *Annual Review of Psychology*, pp. 375-400.

15 T.R. Tyler & J. Jackson, ‘Popular legitimacy and the exercise of legal authority: Motivating compliance, cooperation and engagement’, (2014) 20 *Psychology, Public Policy, and Law*, no. 1, pp. 78-95.

16 T.R. Tyler et al., ‘The impact of psychological science on policing in the United States: Procedural justice, legitimacy, and effective law enforcement’, (2015) 16 *Psychological Science in the Public Interest*, no. 3, pp. 75-109.

17 T.R. Tyler, *Why people obey the law* (2006); T.R. Tyler, ‘Psychological perspectives on legitimacy and legitimation’, (2006) 57 *Annual Review of Psychology*, pp. 375-400.

18 T.R. Tyler, *Why people obey the law* (2006).

19 T.C. Pratt et al., ‘The empirical status of deterrence theory: A meta-analysis’, in F.T. Cullen et al. (eds.), *Taking stock: The status of criminological theory* (2008), pp. 367-396.

20 R. Paternoster, ‘The deterrent effect of the perceived certainty and severity of punishment: A review of the evidence and issues’, (1987) 4 *Justice Quarterly*, no. 2, pp. 173-217.

21 A.R. Piquero et al., ‘Elaborating the individual difference component in deterrence theory’, (2011) 7 *Annual Review of Law and Social Science*, <<https://doi.org/10.1146/annurev-lawsocsci-102510-105404>>, pp. 335-360.

22 *Ibid.*, p. 335. See also R. Paternoster, ‘How Much Do We Really Know about Criminal Deterrence?’, (2010) 100 *Journal of Criminal Law and Criminology*, no. 3, pp. 765-824.

There is disagreement about whether punishment works and perhaps more importantly when. Studies have suggested that deterrence can work but that in real-world settings, the ability of authorities to deploy and maintain sufficient surveillance and apprehension risk to impact on individuals is limited. Problems with deterrence flow not from the inability of risk to shape behavior but from the difficulty of deploying resources into effective strategies based on creating perceived risk. However, my core argument is not that deterrence does not work. My suggestion is not that deterrence does not work but that its effectiveness is often overstated relative to its actual influence and that it is too frequently used to the exclusion of other approaches, whose additional influence is overlooked. The effects of punishment should be supplemented by building legitimacy and engaging moral values and social norms, and drawing on their motivational power to further enhance efforts at maintaining social order. These possibilities emerge from social science theory and supplement that traditional focus of legal scholarship on deterrence.

The problems involved in obtaining everyday compliance with the law are illustrated through compliance issues involving a wide variety of behaviors, ranging from driving and drug use to illegal immigration and the payment of taxes. In terms of the influence of law on people's everyday lives, there is evidence that, across a broad range of behaviors, people do not always follow the law. In each case, although most people comply with the law most of the time, legal authorities are confronted with sufficient noncompliance that it puts a strain on the resources normally devoted to social control. And, for crimes such as the illegal downloading of music, the illegal copying of movies, the recreational use of drugs, and underage drinking, levels of noncompliance are so high as to make effective regulation very difficult.²³

The dominance of instrumental models in the face of their often weak performance in shaping crime-related behavior suggests not that deterrence is ineffective but rather that legal authorities can and do overstate the effectiveness of the utilitarian approach to implementing laws and regulations. They believe that threat strongly deters immediate criminal behavior and that punishment strongly lowers recidivism among offenders and deters others from committing crimes. This may be the case because the limits of sanctions and punishment outlined here initially seem counterintuitive. After all, most people are familiar with many studies whose conclusion is that 'deterrence' or 'punishment' works and research clearly suggests that variations in the likelihood of punishment shape behavior.

An alternative approach is to ask how much of the variance in a behavior a model explains. As an example, MacCoun reviewed the literature on deterrence in the case of drug use and suggested that only about 5% of the variance in drug use was explained by variations in the certainty and severity of punishment.²⁴ Compare the message of statistical significance (something has an impact) with that of the strength of influence. It is not enough to say deterrence has a statistically significant influence on behavior. Even when there are statistically significant effects, deterrence explains at best a very small proportion of the variance in law related behavior.²⁵ In other words, a relationship between two variables can be found to be statistically significant but can nonetheless explain so little of the variance between them that it is of little consequence. Empirical research can be used to test the relative influence of different factors in shaping behavior.

What is the result of comparisons in the ability to explain variance among instrumental and value-based factors? I make such a comparison using a sample of Chicagoans and focusing on everyday compliance with the law.²⁶ I find that the most important factor shaping compliance is morality, followed by legitimacy. Neither social norms nor deterrence are found to be independently influential. I replicated this approach using a national sample in 2012 and found similar results.²⁷ Compliance was linked primarily to morality and secondarily to legitimacy. Neither risk estimates nor norms were independently significant. This study

23 R.J. MacCoun & P. Reuter, *Drug war heresies: Learning from other vices, times, and places* (2001).

24 R.J. MacCoun, 'Drugs and the law: A psychological analysis of drug prohibition', (1993) 113 *Psychological Bulletin*, pp. 497-512.

25 T.R. Tyler et al., 'The impact of psychological science on policing in the United States: Procedural justice, legitimacy, and effective law enforcement', (2015) 16 *Psychological Science in the Public Interest*, no. 3, pp. 75-109.

26 T.R. Tyler, *Why people obey the law* (2006).

27 T.R. Tyler & J. Jackson, 'Popular legitimacy and the exercise of legal authority: Motivating compliance, cooperation and engagement', (2014) 20 *Psychology, Public Policy, and Law*, no. 1, pp. 78-95.

further demonstrated that cooperation with legal authorities to address issues of social disorder is primarily linked to legitimacy and secondarily to morality and norms. Risk again had no distinct influence.²⁸

In the case of everyday compliance with the law empirical studies have indicated that the legitimacy of the police, the courts, and the law is not only important for compliance. It also shapes a variety of important public behaviors. These include deference to police authority during personal encounters,²⁹ everyday compliance with the law,³⁰ cooperation with the police,³¹ and the acceptance of police authority.³² In the case of compliance legitimacy and moral values are both found to have distinct influences that are equal to or greater than the influences of deterrence.

4. Why do people commit corporate crimes?

The goal of comparing influences can be extended beyond everyday law to studies that compare deterrence effects to the influence of the other factors noted – norms, moral values and legitimacy – in the arena of corporate crime. This arena is especially interesting in an era in which white collar crime, i.e. corporate malfeasance, is central to many of our contemporary social problems and issues.

My particular concern is with legitimacy, the value that is under the control of legal authorities and the arena of corporate crime.³³ Tyler & Blader did such a comparison in two studies of employees and showed that risk was relatively unimportant in shaping compliance relative to the legitimacy of the companies' internal culture.³⁴ I examined this same question in a larger survey of 4,430 employees and found that instrumental factors uniquely explained 1% of the variance in required compliance while social factors, including legitimacy, uniquely explained 19% of the variance.³⁵ The influence of instrumental factors was statistically significant within this large sample, but not as strong as the influence of social factors. In fact, this result illustrates the larger point that being statistically significant, which depends upon sample size, is not necessarily the best measure of importance.

I also conducted a study in a major international corporate bank's private banking group several years ago.³⁶ In that study 612 members of the private banking group completed questionnaires regarding their workplace and their workplace behavior. For a subset of employees the answers were compared to responses from supervisors before, as promised, all identifying information was removed from the dataset. The supervisor check suggested that self-report was a valid measure of employee behavior.³⁷

To reflect material gain and loss employees were asked how much they gained by rule following multiplied by the likelihood it would be observed and how much they lost by rule breaking also multiplied by the likelihood it would be observed. They were also asked about their level of compensation and benefits, as well as their long-term prospects.

To reflect consent employees were asked about their judgments on the legitimacy of management; their trust in the motivations of their managers; and their views about the degree to which they and their managers shared values about appropriate goals for the organization. These are three elements of traditional conceptions of legitimacy.

What are the behaviors of concern? Compliance is reported rule following. Its parallel is in-role job performance (doing what is required by your job). Deference reflects voluntary acceptance and its parallel is extra-role behavior (doing what is not required by your job). Finally there is identification with the

28 See *ibid.*, for methodological details about this study.

29 T.R. Tyler & Y.J. Huo, *Trust in the law* (2002).

30 T.R. Tyler, *Why people obey the law* (2006).

31 T.R. Tyler & J. Fagan, 'Why do people cooperate with the police?', (2008) 6 *Ohio State Journal of Criminal Law*, no. 1, pp. 231-275. T.R. Tyler & J. Jackson, 'Popular legitimacy and the exercise of legal authority: Motivating compliance, cooperation and engagement', (2014) 20 *Psychology, Public Policy, and Law*, no. 1, pp. 78-95.

32 T.R. Tyler & J. Jackson, 'Popular legitimacy and the exercise of legal authority: Motivating compliance, cooperation and engagement', (2014) 20 *Psychology, Public Policy, and Law*, no. 1, pp. 78-95.

33 T.R. Tyler, 'Reducing corporate criminality: the role of values', (2014) 51 *American Criminal Law Review*, pp. 267-292.

34 T.R. Tyler & S.L. Blader, 'Can businesses effectively regulate employee conduct?: The antecedents of rule following in work settings', (2005) 48 *Academy of Management Journal*, pp. 1143-1158.

35 T.R. Tyler, *Why people cooperate: The role of social motivations* (2011).

36 See *ibid.*, for details about this research.

37 S. Blader & T.R. Tyler, 'Testing and expanding the group engagement model', (2009) 94 *Journal of Applied Psychology*, pp. 445-464.

organization, which has been linked to all of the previously outlined behaviors and further includes general efforts to facilitate the success of your organization.³⁸ And finally since the company studied was in the midst of a merger the study asked if the employee embraced working to make the merger a success, a specific instance of working for the success of the (newly created) organization.

All factors considered together explained 14% of the unique variance in reported compliance with workplace policies and rules.³⁹ When considered alone incentives and coercion explained 3% of the unique variance; consent based factors 12% of the unique variance. In the case of in-role behavior 10% of the variance in employee behavior was explained; coercion based variables accounted for 3% of the unique variance and consent based variables 8% of the unique variance. All of these influences were significant suggesting that both factors have an effect. However, consent factors were generally at least twice as powerful.

In the case of deference 15% of the variance was explained; coercion based variables uniquely explained 3% of the variance and consent based variables uniquely explained 15% of the variance. This means that while both factors are significant when considered alone when they are considered together consent based variables explain all of the variance in deference. With extra-role behavior 13% of the variance was explained; 4% uniquely by coercion based variables and 11% uniquely by consent based variables.

Finally 40% of the variance in identification with the organization was explained; 4% uniquely by coercion based variables and 40% uniquely by consent based variables. So, again, when both factors were considered together consent based variables explained almost all of the variance. This was reinforced by the variable measuring identification with the new company, with 25% of the variance explained in total. Coercion based variables uniquely explained 3% of the variance; consent based variables uniquely explained 25% of the variance.

So with the variable central to engagement in and active promotion of the organization consent based variables explained all of the variance. These findings are only from one organization, but the study targets the type of high level employees whose jobs are highly discretionary and rule guided. So it is especially relevant to the issue of corporate regulation and to law more generally.

Similarly, Trevino et al. compared the effectiveness of rules and punishment to the internal values and culture of integrity in companies in a study of 10,000 employees in six industries.⁴⁰ Compared to compliance-based programs, values-based programs (which included legitimacy and other value-based factors) had fewer reports of unethical conduct, higher levels of ethical awareness, more employees seeking advice about ethical issues, and a higher likelihood of employees reporting violations. Key factors in values-based programs were treating employees fairly, rewarding ethical behavior, and punishing unethical behavior. Here again, a relative comparison reveals the superiority of a values-based approach in a study that uses a broader conception of values that includes legitimacy, morality and norms.

5. The benefits of a broader view of human motivation

While much of the focus of law is on compliance, the shift toward a consensual model of authority based on legitimacy is additionally valuable because it more easily accommodates a broader set of goals that are becoming increasingly important in society.⁴¹ The first of these goals is cooperation. Cooperation is first important in terms of the traditional issue of deference to legal authorities. While people can obey because of a fear of punishment, it is easier for authorities when they defer out of a willing acceptance of authority. Legitimacy motivates consent.

38 T.R. Tyler & S.L. Blader, 'Can businesses effectively regulate employee conduct?: The antecedents of rule following in work settings', (2005) 48 *Academy of Management Journal*, pp. 1143-1158.

39 This analysis utilized regression analysis. The question asked is how much variance in a criterion or dependent variable was explained by one cluster of variances once the influence of the other cluster was taken into account. This is the distinct or unique contribution of that cluster to explaining the dependent variable.

40 L.K. Trevino et al., 'Managing ethics and legal compliance: What works and what hurts', (1999) 41 *California Management Review*, no. 2, pp. 131-151.

41 T.R. Tyler & J. Jackson, 'Popular legitimacy and the exercise of legal authority: Motivating compliance, cooperation and engagement', (2014) 20 *Psychology, Public Policy, and Law*, no. 1, pp. 78-95.

When legal authority is legitimate, people also more broadly help to co-police their communities. They report crime and identify criminals. They act as witnesses and jurors. They go to neighborhood meetings and participate in neighborhood watch. All of these behaviors help the police to do their jobs. Finally, the police ideally act as an agency that projects a spirit of reassurance and security within the community. Although many people seldom deal with the police, and are calling for services when they do, it is important that they feel that if they have problems or are in danger the police will care about their problems and will take them seriously. Rather than feeling fear around the police and avoiding contact with them whenever possible, when people trust the police they are more willing to engage in their communities by shopping, working, going out for entertainment, and participating politically and in neighborhood groups.⁴²

This illustrates a second contribution of social science theory. One contribution is providing a new model of potentially important inputs into traditionally important goals. In this case values are potential motivators of compliance. A second contribution is to suggest how the goals of concern might be broadened. Deference is not an idea in a coercive framework. It emerges as a potentially valuable goal in a consensual framework.

6. The mystique of instrumentalism

Despite the evidence outlined above the instrumental model remains for many the conventional wisdom. If corporate governance and everyday obedience via legitimacy are a desirable and effective approach why is it so hard to build the case for the importance consensual approaches?

The findings reviewed suggest that legitimacy is a highly desirable feature of social systems with many appealing features as a possible basis for the rule of law. Why, then, is it so difficult to create and maintain a compliance system based upon legitimacy, and why do authorities use instrumental approaches based upon utilitarian models? Why is the immediate response of legal authorities to a crisis, whether it is an issue of financial misconduct or a perceived crime wave, to focus on threats and sanctioning? Empiricism may be a necessary but insufficient condition for changing the legal system. Why?

One reason could be that legal authorities continue despite evidence to overestimate the effectiveness of the utilitarian approach to the implementation of laws and regulations. They believe, for example, that threat deters immediate behavior and that punishment lowers recidivism. If research does not support this argument with the strength that is assumed in the conventional wisdom, as is suggested by the literature reviewed above, then why would it continue to represent the conventional wisdom? One reason is the statistical approach noted above. Studies are framed in ways that support an argument in favor of deterrence, when other framings support different conclusions.

At least some of this conventional wisdom is likely based on behavior that regulatory authorities see occurring in front of their very eyes every day. People faced with coercive authorities who threaten punishment for noncompliance may comply in the moment, when the threat of those authorities is palpable (although evidence suggests that, power differences notwithstanding, they often resist). Then, later (and, more importantly, outside the scope of plausible surveillance), when their behavior is not motivated by the immediate threat of punishment, they renege. As a consequence, those in positions of authority have the continual experience of seeing power work to influence behavior, when in fact that influence is extremely short-lived. People in power therefore come to think that the threat and use of force is a more viable and effective strategy than it actually is.

These beliefs reflect a 'myth of self-interest'. Studies show that people expect others to be more strongly influenced by self-interested judgments, for example about potential rewards and punishments than they actually are.⁴³ This is especially true of people in positions of authority.

In reality, as detailed above, reviews of the literature consistently show that the threat and use of force is often ineffective and generally not as strong as is typically assumed. Variations in the likelihood of being

⁴² Ibid.

⁴³ D.T. Miller & R.K. Ratner, 'The power of the myth of self-interest', in L. Montada & M.J. Lerner (eds.), *Current Societal Concerns about Justice* (1996); D.T. Miller & R.K. Ratner, 'The disparity between the actual and assumed power of self-interest', (1998) 74 *Journal of Personality and Social Psychology*, pp. 53-62.

caught and punished have a minor impact on criminal behavior at best. Whether people are punished is not reliably related to lower levels of future criminal conduct and more severe punishment is not linked to less criminality in the future. When this widespread lack of empirical support for force-based approaches is compared to the general belief in the effectiveness of such models, the question is why this widely held, but mistaken, belief persists?

To some extent this continuation in a flawed belief reflects the self-fulfilling nature of theories and models. Ferraro et al. discuss the dominant role of economic models in organizational theory and the similar lack of strong empirical support for such models in that context.⁴⁴ They argue that whether or not a theory appears self-evident is more strongly related to whether it is consistent with cultural myths than whether it is supported by empirical evidence. This leads to the question of why people find it so compelling to think of people as utilitarian. Does utilitarianism in some way comport with our understanding of everyday experience? At least in the case of authorities these beliefs persist because power produces compliance in the everyday personal experience of legal authorities.

Once people have such a conception of their own and other's motivational nature, it is difficult to let go of those beliefs even when the evidence for them is discredited. As Baron notes: 'We tend to hold to our beliefs without sufficient regard to the evidence against them or the lack of evidence in their favor.'⁴⁵ Psychologists refer to this as 'belief perseverance'.⁴⁶ Instead of openly considering evidence questioning their beliefs, research suggests that people engage in psychological strategies to blunt the impact of discordant information upon their beliefs.

One approach that people use is to look primarily or exclusively for confirming information that allows them to maintain their beliefs.⁴⁷ For example, people shape the way they frame their study of problems in ways that support their prior views. I have noted a general tendency to frame deterrence studies as questions of whether deterrence works, in the sense that its effects can be shown to be significantly different from zero.⁴⁸ Against this relatively low standard deterrence effects are often found and researchers can conclude that deterrence is effective. The question is whether people are drawn to this approach because it supports their suppositions, or the other way around.

Because of this tendency to focus on arguments or evidence consistent with one's prior views a key question is *what type of evidence* can minimize these motivations and encourage people to be open to new information. Kahan has discussed this issue in the context of messages about climate change.⁴⁹ People have a natural tendency to interpret messages through the framework of their prior ideology and to engage in identity protective cognitions. On the other hand, this does not mean that people are always insensitive to information that goes counter to their prior beliefs. Both the crafting of messages and general training and experience can shape openness. Kahan, for example, shows that judges are more open to discrepant messages than the general public something that he feels may reflect their professional training and experience.

The same argument suggests that there are better and worse ways to craft messages for them to have an impact.⁵⁰ In the context of the environment Feinberg & Willer found that when messages of change were framed in terms of values that conservatives support (purity), they had more influence upon attitudes. Similarly Feygina et al. show that the framing of environmental messages influences their ability of those messages to overcome people's prior values.⁵¹ If global warming is presented as a threat to the maintenance of the status quo, conservatives support measures to combat it. If they are told that global warming requires societal change, they oppose those measures.

44 F. Ferraro et al., 'Economics language and assumptions: How theories can become self-fulfilling', (2005) 30 *Academy of Management Review*, pp. 8-24.

45 J. Baron, *Thinking and deciding* (2000).

46 C.A. Anderson et al., 'Perseverance of social theories', (1980) 39 *Journal of Personality and Social Psychology*, pp. 1037-1049. L. Ross et al., 'Perseverance in self-perception and social perception', (1975) 32 *Journal of Personality and Social Psychology*, pp. 880-892.

47 D. Kahan, 'Ideology, motivated reasoning, and cognitive reflection', (2013) 8 *Judgment and decision making*, pp. 407-424.

48 S.T. Ziliak & D.N. McCloskey, *The cult of statistical significance: How the standard error costs us jobs, justice, and lives* (2008).

49 D. Kahan, 'Ideology, motivated reasoning, and cognitive reflection', (2013) 8 *Judgment and decision making*, pp. 407-424.

50 M. Feinberg & R. Willer, 'The moral roots of environmental attitudes', (2013) 24 *Psychological Science*, pp. 56-62.

51 I. Feygina et al., 'System justification, the denial of global warming, and the possibility of system sanctioned change', (2010) 36 *Personality and Social Psychology Bulletin*, pp. 326-338.

The import of all of these perspectives can be summarized simply. When people have preconceptions about what is important they have many ways to ignore evidence that undermines their point of view. Hence, a key virtue of empirical research is that it is falsifiable. It can disconfirm people's views and when it does it is powerful. That does not mean that people cannot undermine or discredit data, they can. But as a form of evidence it has strength and value and can cause people to recognize the validity of perspectives that they have initially dismissed. The question of what persuades is always relative and empirical research has been shown to be one of the more powerful ways to change the legal system.

7. New models of compliance

The policies and practices of legal authorities as well as the metrics against which they are evaluated are the product of theoretical models about the human actor. They are the key node for both micro-economic and psychological analysis but the models that have dominated legal analysis reflect only a subset of those that are available in psychology. Simple empiricism, i.e. establishing facts about the system, is not enough to change this framework. It is important to draw upon a newer and broader conceptual framework to identify factors that are outside of the coercive model and then include tests of those models in examinations of how law related behavior can be influenced.

The perceived dominance of deterrence is further aided by the tendency to collect data based upon the framework of existing theory. In the United States, national surveys collect information on crime rates, arrest rates, and sentencing. These can be linked to statistics on the certainty and severity of punishment, as well as the length of sentences. However, it is not possible to compare influences to those of legitimacy in most cases because legitimacy is not assessed.⁵² There are no national survey research studies dedicated to the periodic measurement of the legitimacy of law, the courts, or the police or administrative regulatory agencies.

My suggestion is that a central benefit of social science theory is to broaden the theoretical framework through which we understand the human actor and to provide a mechanism, via empirical research to demonstrate that this broader framework can provide a viable basis for a system of law based upon human values. Such a broader framework is not simply a better way to achieve the traditional goal of compliance, although evidence shows that it is that, it also allows the nature of the relationship between people and law to be reconceptualized in ways that better facilitate the achievement of social order in 21st century democratic societies.

This argument can first be made in relationship to the traditional goal of law: to obtain compliance with laws and the decisions of legal authorities. Why do people obey the law?⁵³ Economic models place their emphasis on the risk of punishment. Sanction risks do shape compliance; but research suggests that values, in particular legitimacy, play a similarly and perhaps even more important role in shaping compliance.

How is legitimacy created and maintained?⁵⁴ Again, an economic model focuses on control over outcomes, while psychological models articulate a broader set of antecedents, including respect and trust. And, again research suggests support for a broader model based on procedural justice. Hence, psychology posits and psychological research supports a broader conception of the psychology underlying compliance.⁵⁵

8. Methodological questions

These divergent models also identify several key methodological questions that are inevitably going to be central to evidence based law. The first is the proper balance of internal and external validity in research. The classic studies of Thibaut & Walker on procedural justice were almost immediately discounted in law

52 T.R. Tyler, *Psychology and the design of legal institutions* (2007).

53 T.R. Tyler, 'Psychological perspectives on legitimacy and legitimation', (2006) *57 Annual Review of Psychology*, pp. 375-400.

54 T.R. Tyler et al., 'The impact of psychological science on policing in the United States: Procedural justice, legitimacy, and effective law enforcement', (2015) *16 Psychological Science in the Public Interest*, no. 3, pp. 75-109.

55 T.R. Tyler, *Why people obey the law* (2006); T.R. Tyler, 'Psychological perspectives on legitimacy and legitimation', (2006) *57 Annual Review of Psychology*, pp. 375-400.

because they were laboratory based.⁵⁶ This illustrates the ongoing conflict about what types of methodologies contribute research that has probative value in legal arenas.

A second but related issue is the degree to which legal environments allow for the possibility of empirical research. In the case of the current arena, most legal systems collect data relevant to deterrence, but not to legitimacy. And, because most actors believe in deterrence they have supported randomized control trials to test its impact, being willing to allocate police officers or change sanctions to test policies. In contrast, because many actors do not believe that values are important or that procedural justice matters there has been resistance to manipulations along such dimensions. According to one important movement in criminology, which emphasizes the need for randomized control trials in field settings, such studies are the most probative. But they can seldom be conducted without the active cooperation of legal authorities, so in many cases the prior beliefs of the authorities dictate whether those prior beliefs can even be tested.

These two issues are related because experimental research, in particular, requires the cooperation of authorities to randomly assign participants to treatments. To the extent that research is evaluated in terms of internal validity and field experiments are the 'gold standard' for evidence, social change is controlled by existing authorities. If they do not permit their assumptions to be tested, then no high quality evidence will be available to evaluate those assumptions.

9. Conclusion

Evidence informed law is an important new trend in law both within the United States and in Europe. Its underlying ideas of course extend to all legal systems, irrespective of whether they are common law based like the United States, legislative, as is true in many European societies, and/or mixed. At this time much of this empiricism involves the atheoretical use of empirical research methods.

This article suggests that a more neglected aspect of reliance on evidence is the use of theoretical models from social science to define the scope of the questions about which empiricism occurs. This approach allows social science to expand the framework within which law operates. It makes the important contribution of identifying factors that would be predicted to matter, but are currently minimized. And it provides a methodology for testing those theoretically based arguments. ■

⁵⁶ J. Thibaut & L. Walker, *Procedural justice* (1975).