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MECHANISMS OF LEGAL EFFECT: PROCEDURAL JUSTICE THEORY

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Summary

The effectiveness of behavioral regulation depends in significant part on the willingness of citizens to consent to the commands of legal authorities and to actively cooperate with them. Two values constituting what sociologist Max Weber called “legitimacy” are of particular importance to compliance: the individual’s sense of obligation to obey authorities, and his or her sense of trust and confidence in legal authorities. While it is sometimes possible to motivate compliance by creating a risk of punishment for non-compliance, regulating behavior through threats can undermine people’s own commitment to norms, rules, and authorities. Voluntary healthy behavior that is motivated by a person’s own attitudes and values is superior from a regulatory perspective to behavior that has to be coerced. When values are the driver of behavior, rule adherence does not need to be sustained either by enacting a credible system of surveillance and sanctioning or by developing a way to incentivize desired behaviors.

Legitimacy is a quality that is possessed by an authority, a law, or an institution that leads others to feel obligated to accept its directives. Self-regulatory motivations are activated when people believe that legal authorities are legitimate and they therefore have an obligation to conform to the law, and when people have trust and confidence in those authorities. People who identify with legal authorities and imbue the legal system with legitimacy will voluntarily abide by laws and defer to authorities. Legitimacy can be built through procedural fairness. Procedural justice is the study of people’s subjective evaluations of the justice of procedures – whether they are fair or unfair, ethical or unethical, and otherwise in accord with people’s standards of fair processes for social interaction and decision making. The two key dimensions of procedural fairness judgments are fairness of decision making (voice, neutrality) and fairness of interpersonal treatment (trust, respect). Robust tools have been developed to measure procedural justice and have been used in important health research.

Learning Objectives

- Define and describe the components of procedural justice.
- Illustrate the significance of legitimacy and self-regulatory behavior in developing, implementing, and enforcing public health law.
- Design a legal epidemiology study that incorporates procedural justice in examining compliance to a public health law.

Law is a prominent intervention tool through which citizens, acting through their democratically elected government, can seek to achieve public health goals (Burris, Wagenaar, Swanson, et al., 2010). To take a straightforward example, governments create regulations banning smoking in public places, and provide penalties, typically a fine, for those who disobey those rules. The government similarly promotes public health by regulating the quality of drugs that are sold in America, again creating rules and enforcing them through a system of fines and, in extreme cases, criminal penalties. These regulations are an effort by government to improve public health by putting the force of law behind stopping unhealthy behaviors.

The COVID-19 pandemic highlighted the many ways that governments seek to manage people, with requirements ranging from wearing a mask and social distancing to self-reporting symptoms. Research in the United States and Europe documents the important role that perceived obligation to obey the law and legal authorities can play in motivating compliance with COVID-19-related rules (Folmer et al., 2021; Kooistra et al., 2021; Reinders et al., 2020; Van Rooij et al., 2021). It also makes clear that there are other forces that can be important, particularly when trust in law is low, including strong community norms (Ho, 2021) and trust in science (Bicchieri et al., 2021).

It might be initially imagined that the way these laws influence behavior is straightforward. If a law or regulation is passed and backed up by threats of fines, arrest, or incarceration, behavior will change. If wearing safety belts is mandated, people will wear belts to avoid getting a ticket. The threat of a sanction certainly can work but obtaining a high level of compliance with the law is complex and can be difficult; the ability of law to shape public behavior is the result of many interacting factors that vary depending on local conditions, the behavior, and the target population. Studies suggest that the limits of mandated compliance are typically linked to capacity. When the government cannot effectively monitor and sanction people, coercion does not work. This is particularly true when the government is trying to manage behavior that is widespread within the population, such as everyday mask wearing or social distancing.

From a social psychological perspective, the effectiveness of the legal system depends at least in part on the willingness of citizens to voluntarily consent to the operation of legal authorities and to actively cooperate with them. Social psychologists posit that behavior is determined by two main forces. The first is the pressure of the situation or the environment, and the second includes the

motives and perceptions that the person brings to the situation. In Lewin's famous equation, behavior is understood to be a function of the person and the environment: $B = f(P, E)$. An expanded conception of the *person* term includes the set of social and moral values that shape the individual's thoughts and feelings about what is ethical or normatively appropriate to do. The *environment* includes the way legal officers and institutions behave in their creation and enforcement of rules.

Where compliance with the law is concerned, two values constituting what sociologist Max Weber called "legitimacy" are of particular importance to defining P: the individual's sense of obligation to obey authorities, and his or her sense of trust and confidence in legal authorities (Weber, 1968). These feelings of legitimacy, and the willingness to comply with law, are influenced by the legal environment. There are a variety of reasons that people might view an authority as legitimate. Research has made a compelling case for the positive effect of perceptions of procedural justice on an individual's sense of a rule's legitimacy and his or her compliance with it. This chapter will examine the complexity of compliance and propose an approach to studying health-related behavior that has been effective in other settings. This approach is known in the literatures on law, regulation, and social psychology as "procedural justice."

Complying with the Law

The problems involved in obtaining compliance with the law in everyday life involve a wide variety of regulations, ranging from traffic laws (Tyler, 2006) to drug laws (MacCoun, 1993). While most people comply with the law most of the time, legal authorities are confronted with sufficient noncompliance to be challenging to regulatory resources. In situations such as the use of illicit or addictive substances, levels of noncompliance are high enough to suggest a substantial failure of current regulatory strategy (MacCoun, 1993). People do indeed comply with the law in the presence of a legal authority, but the same people often revert to their prior behavior once that authority is absent (McCluskey, 2003).

If citizens fail to sufficiently obey legal restrictions, further intervention by legal authorities eventually will be required to obtain the desired level of compliance. Continued monitoring and enforcement are sometimes feasible. For example, smoking bans in workplaces or restaurants are enforceable because these are inherently social settings and behavior is monitored. Similarly, smoking or mask wearing on airplanes can easily be monitored by smoke detectors or enforced by flight attendants. In other cases, ranging from speeding to substance abuse, consistent oversight and enforcement have been more difficult. The problem may be in developing strategies of monitoring or enforcement – hidden behaviors may be difficult to detect, for example, or we may know how to monitor the behavior – speeding for instance – but lack the resources to maintain enforcement at a sufficiently high level to achieve deterrence. These difficulties have been strikingly revealed in the COVID-19 era by the challenge of enforcing rules about mask wearing, social distancing, and vaccination.

There are two principal models for compliance or rule adherence. The first is deterrence theory, also referred to as a sanction-based or command-and-control model. The assumption underlying this theory is that we shape behavior by varying the risks associated with breaking rules, the gains associated with adherence, or both (see Chapter 5). The legal system attempts to project credible risks for wrongdoing. As any driver knows who has stopped talking on a cell phone as a patrol car came into view, rule adherence can be influenced by whether people perceive that rule breaking will be detected and punished.

It is sometimes possible to motivate compliance by creating a risk of punishment for non-adherence (a fine for smoking) or incentives for adherence (payment for exercising at the gym). Studies demonstrate, however, that regulating behavior through threat serves to undermine people's commitment to norms, rules, and authorities (Frey, 1997, 1998; Frey & Oberholzer-Gee, 1997). This is an important deleterious side-effect of a deterrence-based regulatory approach. It would be optimal from a regulatory perspective if these forces could work together. Research suggests that they do not always do so. Appeals to people's internal motivations can be undercut when people frame compliance in terms of possible risk of sanctioning (Schmelz, 2021).

From a motivational perspective, instrumental approaches such as deterrence are not self-sustaining and require the maintenance of institutions and authorities that can keep the probability of detection for behavior that threatens public health at a sufficiently high level to constantly motivate the public through external means (that is, the threat of punishment or provision of incentives). Over time it becomes more and more important to have such external constraints in place, as whatever intrinsic motivation people originally had is gradually "crowded out" by external concerns. In other words, the very behavior of surveillance creates the conditions requiring future surveillance.

There are two distinct points to be made about instrumental approaches. The first is that motivating compliance via the use of incentives and sanctions is a suppression strategy. It requires the continual presence of credible self-interest risks to maintain desired behavior. Sanction-based approaches do not build legitimacy or promote norms. Second, sanction-based strategies can undermine whatever internal norms and values are already motivating people. To the degree that incentives and sanctions crowd out the field, the role of norms and values lessens over time.

Self-regulation offers an alternative to the deterrence model. In a self-regulatory model people are seen as motivated to follow rules because their own values suggest to them that doing so is the appropriate action to take. Voluntary healthy behavior that is motivated by a person's own attitudes and values is superior from a regulatory perspective to behavior that has to be coerced. When values are the motivator of behavior, rule adherence does not need to be sustained either by enacting a credible system of monitoring and sanctioning or by developing a way to incentivize desired behaviors. A variety of "nudges" designed into environments can enhance the prevalence of healthy behaviors consistent with commonly held values (Thaler & Sunstein, 2008). When healthy

behavior is motivated by nudges, as when it is shaped by values, a key issue is the ability to create sustained change.

The general legal question is how to motivate everyday adherence to legal rules, or self-regulation. The key issue is how to create and maintain values that motivate people to take personal responsibility for behaviors that promote the public's health (Tyler, 2006, 2006a). A good deal of research in the legal arena indicates that self-regulatory motivations are activated when people believe that legal authorities are legitimate and they therefore have an obligation to conform to the law (Tyler, 2007, 2008). Consequently, people who identify with legal authorities and imbue the legal system with legitimacy will voluntarily abide by laws and defer to authorities (Darley, Tyler, & Bilz, 2003; Jost & Major, 2001; Tyler, 2006; Tyler & Blader, 2000).

Legitimacy

The issue of legitimacy is widely studied in the arena of law, and it is clear both that the legitimacy of legal authorities (for example health officials, police officers) and of the law itself shapes law-related behavior (Tyler, 2006a). Modern discussions of legitimacy are usually traced to the writings of Weber (1968) on authority and the social dynamics of authority (for example, Zelditch, 2001). Weber, like Machiavelli and others before him, argue that successful leaders and institutions do not rely solely or even primarily on brute force to execute their will. Rather, they strive to win the consent of the governed so that their commands will be voluntarily obeyed (Tyler, 2006). Legitimacy, according to this general view, is a quality that is possessed by an authority, a law, or an institution that leads others to feel obligated to accept its directives. When people ascribe legitimacy to the system that governs them, they become willing subjects whose behavior is strongly influenced by official (and unofficial) doctrine. They also internalize a set of moral values that is consonant with the aims of the system (Jost & Major, 2001). Although the concept of legitimacy has not featured prominently in recent discussions of social regulation with respect to law-abiding behavior, there is a strong intellectual tradition that emphasizes the significance of developing and maintaining positive social values toward cultural, political, and legal authorities (Easton, 1965, 1975; Krislov, Boyum, Clark, Shaefer, & White, 1966; Melton, 1986; Parsons, 1967; Tapp & Levine, 1977).

A values-based perspective on human motivation therefore suggests the importance of developing and sustaining a civic culture in which people abide by the law because they feel that legal authorities are legitimate and ought to be obeyed. For this model to work, society must create and maintain public values that are conducive to following behavioral norms. Political scientists refer to this set of values as a "reservoir of support" for government and society (Dahl, 1956). Studies indicate that values shape rule following (Sunshine & Tyler, 2003a, 2003b; Tyler, 2006, 2006a; Tyler & Fagan, 2008), and that the influence of values is stronger than the effect of risk estimates (Sunshine & Tyler, 2003a).

Some laws merely facilitate social coordination – for example, making sure that everyone drives on the same side of the road. In these instances, the particular form of appropriate behavior is not the key issue. Rather, the important thing is that people agree upon what is appropriate and behave accordingly. While the law enforces such rules, enforcement is not a major societal issue because people have little or no motivation to undermine or disobey such rules. There is very little to be gained by driving on the wrong side of the road. Similarly, some laws are directed at acts that are deemed inherently wrongful, such as murder or the adulteration of food. Most people don't intend to break these rules, and have no objection to deterring the few who do through surveillance and harsh punishment.

Legitimacy becomes more contested when the function of the law is to restrict behavior that is not seen as inherently wrongful and may even offer benefits to the actor. Legal intervention in matters like this is most likely to seem legitimate in situations in which behavior harms others directly. For example, the case for restricting smoking via law became more compelling when smoking was recognized to have second-hand effects. This recognition of harm to non-smokers legitimated the introduction of smoking bans in public places in ways that the harm of smoking to smokers was never able to do. The public reasoning is that people have the right to choose to harm their own health but they are not entitled to choose to harm others.

Many public health measures address harm to people other than the actor, but just as many are partially or primarily paternalistic – aimed at encouraging people to avoid harming themselves by making healthier choices. Paternalistic public health restrictions present an interesting case for legitimacy-oriented approaches to compliance. They regulate everyday personal activities, promoting desirable health-related behavior (exercise, healthy diet, safe sex) or discouraging undesirable behavior (overeating, smoking, and drinking in excess). Sometimes the behavior – smoking, drunk driving, unsafe sex – threatens harm to others, but often the person most immediately at risk of harm is the actor him or herself. In some cases, for example COVID-19, the harm to oneself and to others is intermingled and there are several reasons to follow rules.

There is vigorous philosophical debate as to whether it is proper for government to interfere with individual choices that do not pose a risk to others (Epstein, 2003; Thaler & Sunstein, 2008). A committed anti-paternalist may regard any such law as illegitimate, regardless of its good intentions or the severity of the risk to the actors. But even those who are prepared to accept some paternalism as a matter of principle (or who don't even think about the issue) may not share the health policy maker's sense of the risks of a specific behavior or the advantages of giving it up. Smoking, drinking, and eating are all things that people enjoy doing. Convincing them to change gratifying behaviors voluntarily is no easy task. Indeed, forcing them to change their own behavior against their desires risks undermining the legitimacy of legal authority.

Interventions that merely provide information have limited effects. Despite the fact that people are the primary beneficiaries of their own better health, studies make clear that people often fail to

engage in practices that ensure that health (Brewer, 2017). This is true in terms of everyday life, in which people drink too much, use unhealthy drugs, have sex without protection, become obese, and smoke. Even with the benefit of simple guidance, such as the food pyramid developed by the United States Department of Agriculture, people do not conform to eating regimes intended to prevent or minimize health problems that are prevalent across the population.

The threat of punishment seems to work poorly for cases where the behaviors are ubiquitous and difficult for authorities to observe and monitor. Both practically and politically, many important health-related behaviors, such as overeating of unhealthy foods, are going to be hard to directly address through laws that punish those who engage in the behavior. People like high-fat foods, for example, and the food industry deploys huge resources to retain that support and forestall regulation. Even if there were widespread popular support for punishing those with unhealthy lifestyles, it would be hard to devise or enforce any suitable regulations on consumers. Problems of surveillance are likely to be particularly important, given that activities such as being a couch potato, snacking, and having sex tend to happen in the privacy of the home. Regulating food producers and distributors rather than individual consumers is likely perceived as a more legitimate and is probably a more effective use of threats of punishment. On the other hand, it is important to recognize that deterrence-based approaches can have substantial benefits by significantly shaping behavior when the right conditions exist.

These factors predict that public health efforts to regulate unhealthy behaviors are likely to look similar in the future to how they have looked in the past. Activities that are seen as innately bad and dangerous to others will be prohibited. Paternalistic public health regulations that seek to motivate an individual to forego a short-term benefit in return for a long-term one will continue to rely more on “soft” regulatory techniques. These include warning and informational labels or signs, official guidelines, and attempts to make healthy behavior a default option. In a few cases, involving products that have been perceived to have a risk-utility profile akin to cigarettes – trans fats, to take a recent example – bans may be enacted. Similarly, “sin taxes” may on occasion be extended to new products, like sugar-sweetened beverages, to increase the incentive to avoid them. Getting support for these measures, and getting the desired level of compliance and behavioral change, will depend to a great degree upon the extent to which people either trust scientists who point out the risks and urge safe behavior, or take the view that they ought to obey the law because it is the law – in other words, on government legitimacy.

Gaining public support for lifestyle changes is likely to be especially challenging when authorities are arguing for some behavior change that is good for a person. Liberal paternalism tries to convince a person that their own self-interest is better served by some type of lifestyle change. In contrast the authorities can also try to motivate a person to change in ways that accord with their own views about how that person should live. Both types of changes can be attempted through appeals to values, by offering incentives or threatening sanctions or by modifications in people’s everyday environment that shape their choices. Whatever approaches are used, accepting

change is likely to be harder when it is not possible to suggest that the change benefits the changer. Arguing that a person should lose weight so they will live longer is different than asking someone to promise to donate their organs when they die because that will help someone else.

It is trust in the motivations and character of both legal and non-legal authorities (the US Food and Drug Administration, the Centers for Disease Control and Prevention, the Surgeon General) and others in the public health system of regulation that matters most when everyday people as well as organizations responsible for healthy behaviors (for example schools, corporations) are trying to decide whether to accept the decisions and guidance of such authorities. People should not need to feel obligation to obey decisions that are in their own interest, but mistrust of the motivations of public health authorities may lead to suspicion about their recommendations and may undermine the willingness to follow their directives and advice. Therefore, people can be motivated to engage in healthy behaviors and not to engage in unhealthy behaviors by their feelings of responsibility and obligation to government authorities.

The extension of a values-based model to public health and public health law suggests that public health laws and behavioral guidelines are most likely to gain compliance if they are perceived as legitimate. It is therefore important for public health authorities and institutions to consider the factors that shape their legitimacy – and important for health researchers to study them. Further, the role of law can be a facilitative one. If desirable practices for creating and sustaining legitimacy are identified, the legal system can create and implement structures for mandating those practices. Murphy and colleagues (2021) provide an excellent example of research on legitimacy. Among a sample of Australians, compliance with COVID-19 restrictions was found to be most strongly motivated by normative concerns linked to the duty to support legal authorities; legitimacy mattered more than either self-interest or health concerns in shaping the public's behavior.

Procedural Justice

If public health authorities know that they can benefit from being viewed as legitimate, they need evidence-based guidance as to how they can facilitate such public views. Studies suggest that legitimacy can be built through procedural fairness. Authorities can gain a great deal in terms of legitimacy when they follow clear norms of procedural justice, including impartiality, transparency, and respect for human dignity (Tyler, 2003). Thus, implementing fair procedures as well as providing favorable or fair outcomes can provide a solid basis for establishing system legitimacy with public health authorities. Questions about the extent to which procedural justice is enacted by health authorities, and the effects procedural justice has on health behaviors, constitute an important agenda for legal epidemiology. This section discusses some theoretical and methodological aspects of this agenda.

ELEMENTS OF PROCEDURAL JUSTICE

Procedural justice is the study of people's subjective evaluations of the justice of procedures – whether they are fair or unfair, ethical or unethical, and otherwise in accord with people's standards of fair processes for social interaction and decision making. Subjective procedural justice judgments have been the focus of a great deal of research attention by psychologists because they have been found to be a key influence on a wide variety of important group attitudes and behavior (Lind & Tyler, 1988). In particular, they shape legitimacy (Tyler, 2000).

Procedural justice has been especially important in studies of decision acceptance and rule following, which are core areas of legal regulation. A central point for legal authorities is that people are responsive to evaluations of the fairness of procedures, even when authorities do not provide the outcomes people hoped for. Tyler and Huo (2002) for example, studied people's experiences with the police and courts. In the case of the police, they found that the primary way that people had personal experiences with the police was by calling them for help, or going to court about a problem. However, when people called the police for help, approximately 30% of the time they reported a negative outcome (that is, a problem not solved). From a legitimacy perspective, police inability to help was not a central concern; rather, people evaluated the police by the justice of their procedures for managing the request for help. The same result emerges in situations in which legal authorities are responding to a public request for assistance. People are found to regard the police/judges as legitimate if they believe that the police/judges exercise their authority through fair and impartial means, not by their satisfaction with the outcome (Sunshine & Tyler, 2003a; Tyler, 2006). Indeed, the evidence suggests that procedural justice judgments are more central to judgments of legitimacy than are such factors as the perceived effectiveness of the police in combating crime, and procedural justice is more important for courts than issues of cost or time to resolution. With all these types of contact, decision favorability was not key. To the extent that people perceive law enforcement officials as legitimate, they are significantly more willing to comply with the law in general (Sunshine & Tyler, 2003a; Tyler, 2006).

When people indicate that authorities are or are not procedurally fair, what do they mean? Recent discussions identify two key dimensions of procedural fairness judgments: fairness of decision making (voice, neutrality) and fairness of interpersonal treatment (trust, respect) (Blader & Tyler, 2003a, 2003b). Studies suggest that people are influenced by both aspects of procedural justice.

Procedures are mechanisms for making decisions. When thinking about those mechanisms, people evaluate fairness along several dimensions. First, do they have opportunities for input before decisions are made? Second, are decisions made following understandable and transparent rules? Are decisions themselves explained? Third, are decision-making bodies acting neutrally, basing their decisions upon objective information and appropriate criteria, rather than acting out of personal prejudices and biases? Fourth, are the rules applied consistently across people and over time?

Quality of interpersonal treatment is found to be equally important. It involves the manner in which people are treated during a decision-making process. First, are people's rights respected? Second, is their right as a person to be treated politely and with dignity acknowledged, and does such treatment occur? Third, do authorities consider people's input when making decisions, and are decision makers responsive to people's needs and concerns? Finally, do authorities account for their actions by giving honest explanations about what they have decided and why they made their decisions? Do they make clear how they have considered people's arguments and why they can or cannot do as people want? Judgments about the character and motivation of the decision maker – issues of trust in their intentions – is an aspect of interpersonal treatment.

If people only viewed those authorities who make decisions with which they agree as legitimate, it would be difficult for authorities to maintain their legitimacy, insofar as the authorities are required at times to make unpopular decisions and deliver unfavorable outcomes. With state and local health authorities, for example, the effective practice of reducing chronic and fatal illnesses resulting from smoking or second-hand exposure to smoke has involved prohibiting the sale of tobacco products to minors. Mandating people to take actions that require effort, willpower, and potentially enduring pain, or at least lack of benefit, requires that those individuals have a basis for viewing the authority involved as someone who ought to be deferred to and accepted.

Tyler, Mentovich, and Satyavada (2011) examined the role of procedural justice in promoting deference to doctor's recommendations by interviewing patients about their own doctors. They found that the procedural justice of the doctor was a strong predictor of both believing that the doctor had a competent treatment plan and accepting his or her treatment recommendations. The quality of interpersonal treatment was found to be especially important. Further, patients who believe their doctor acted fairly were less likely to indicate that they wanted to change doctors. Mentovich, Rhee & Tyler (2014) extended the examination of procedural justice to people's health plan choices. They asked people to compare different health care plans that varied along two dimensions: the degree to which people had a choice of doctors and the cost or average life expectancy of the plan. The study found that people choose the high choice plan even when it cost more or offered them on average less expected future life. This emphasizes the degree to which people value choice more than material costs or health gains.

MODERATORS OF PROCEDURAL JUSTICE

The underlying assumption behind procedural justice mechanisms is that experiencing just procedures reaffirms people's identity and feelings of status and inclusion within a society (Bradford, Murphy, & Jackson, 2014). This suggests that people need to feel that they are members of a group and that the authorities with whom they deal represent that group for procedural justice to work. An example supporting this argument is provided by an experimental study reported in Smith, Tyler, Huo, Ortiz, and Lind (1998). An experiment was conducted in which University of California, Berkeley, undergraduates were treated disrespectfully by an experimenter who was

wearing either a University of California, Berkeley (in group) or a Stanford (out group) sweater. As predicted the self-esteem of participants declined, but only when the experimenter was an in-group authority. Disrespect from an out-group authority had no identify implications. Similarly, Tyler, Lind, Ohbuchi, Sugawara, and Huo (1998) compared cross-cultural to within-cultural negotiations. They found that when people were negotiating with members of their own group procedural justice mattered more than when they were negotiating with a member of a different group. This was equally true for American and Japanese participants. A consequence of this finding is the recognition that it is important to create and build a shared group identify that includes relevant authorities. When that does not happen procedural justice effects are likely to be weaker or nonexistent.

Group identity is a matter of degree. Even people who feel marginal within or alienated from a society may still care about procedural justice, although perhaps to a lesser degree. For example, Murphy, Bradford, Sargeant, and Cherney (2021) found that immigrants in Australia were less identified with law and legal authority than long-term residents. Their degree of identification influenced the degree to which procedural justice shaped cooperation with the police. In the case of COVID-19, McCarthy, Murphy, Sargeant, and Williamson (2021) found that the procedural justice of police treatment influenced compliance even among the most defiant members of Australian society.

PROCEDURAL JUSTICE IN ORGANIZATIONS

Research in organizational settings suggests a very promising direction for law in motivating healthy behaviors. Such research shows that the manner in which authority is exercised in organizations influences the way people within them feel about themselves, including shaping their feelings of self-esteem and self-worth (Tyler & Blader, 2000). These findings have developed within the psychological literature on procedural justice, but are of obvious relevance to health given the increasing recognition of the effect of workplace hierarchy on the health outcomes of employees (Commission on Social Determinants of Health, 2008).

Studies show that creating procedurally just organizations enhances the physical health of people within those organizations. In a laboratory study, Vermunt and Steensma (2003) examined the influence of procedural justice upon the level of stress participants experienced when involved in a difficult mental task. They used physiological measures of stress and found that fairness mitigated stress levels. Schmitt and Dorfel (1999) studied factory workers and found that procedural justice lowered psychosomatic problems (for example, sick days taken; days at work when the worker “felt sick”). In a similar study of workers in health centers in Finland, Elovainio, Kivimäki, Eccles, and Sinervo (2002) found that procedural justice lowered occupational strain. Meier, Semmer, and Hupfeld (2009) found that lower procedural justice in a sample of employees was linked to higher depressive moods among those with high but unstable self-esteem. Suurd (2009) found that procedural injustice was related to psychological strain in a sample of military

personnel. Other studies link procedural justice to mental health (Eib, Bernhard-Oettel, Magnusson Hanson, & Leineweber, 2018; Ndjaboue, Brisson, Vézina, 2012).

This connection between the procedural justice of organizations and stress among their members is strongly supported by a series of epidemiological studies. Kivimäki, Elovainio, Vahtera, Virtanen, and Stansfield (2003) studied a sample of 1,786 female hospital employees and found that low procedural justice was linked to higher levels of psychiatric disorders. Kivimäki, Ferrie, Head, and others (2004) studied 10,308 civil servants and found that procedural justice was related to self-reported health. Similarly, Liljegren and Ekberg (2009) found that procedural justice was related to self-reported health in a sample of Swedish workers. Kivimäki, Ferrie, Brunner, and others (2005) found that in a study of 6,442 British civil servants procedural justice was related to coronary health disease. Further, it has been found that procedural justice is linked to smoking, with those who feel unfairly treated 1.4 times as likely to be heavy smokers (Kouvonen et al., 2007); to drinking, with the unfairly treated 1.2 times more likely to be heavy drinkers (Kouvonen, Kivimäki et al., 2008); and to problems with sleeping at night (Heponiemi et al., 2008).

In light of the findings above, important questions emerge for legal epidemiology researchers in relation to how organizations can best promote fair procedures, what particular effects such procedures can have, and whether law should mandate justice within organizations. In their study of mandated justice, for example, Feldman and Tyler (2010) use a combined survey and experimental design to examine whether the influence of fair procedures in a work organization is influenced by whether the decision to create fair procedures is the choice of management or the result of government-mandated rights. Their findings suggest that government-mandated fair workplace procedures have a stronger impact on employee shaping their attitudes toward the company and their behavior in the workplace. New research is needed to produce evidence on whether mandated procedures have a direct impact on employee health.

Researchers can also explore the question of whether voluntary corporate efforts yield better results than mandated efforts. Research on “new governance” has revealed less of an emphasis on formal legal regulation and more on the voluntary efforts of both civic groups and market-driven business organizations to create and maintain internal procedures for enforcing, among other things, standards of ethics and social responsibility (Braithwaite, 2008; Gunningham, 2007; Lehmkuhl, 2008; Parker, 2002; Shamir, 2008). These new forms of governance highlight the importance of reconsidering the degree to which the state should intervene directly within work organizations by mandating appropriate procedures.

The literature on governance also highlights the idea that procedural justice can occur in two ways. First, people can experience fair procedures when policies are being created. Here the emphasis has been on community participation and allowing community input when policies are being created. Second, the authorities involved in implementing policies can act fairly. It is not enough, for example, to implement a smoking ban using fair procedures. Procedural justice also

involves allowing affected parties to participate in discussions about whether there should be rules regulating smoking and what those rules should be.

Measuring Legitimacy and Compliance

Tyler's central work on the concept of legitimacy and compliance and how to measure them is his book titled *Why People Obey the Law* (2006), which explored the question of why people comply with the law. The research for this book employed a large-scale survey (Tyler, 2009). The questionnaire was administered via telephone in two waves, the first with a random sample of 1,575 Chicago residents and the second with a random sample of 804 citizens who were re-interviewed one year later.

This research was focused empirically on peoples' experiences with and attitudes toward the police and the courts as well as peoples' compliance with the law (see Tyler, 2006, Appendix A). Many questions were designed to measure the concept of fairness, such as the following:

Overall, how fair were the procedures used by the police to handle the situation when they stopped you? Were they:

- Very fair
- Somewhat fair
- Somewhat unfair, or
- Very unfair
- Do not know [Tyler, 2006, p. 180].

What emerged both during and after the research for *Why People Obey the Law* is that while having a fixed set of responses is helpful, it is also important not to have yes-or-no questions but rather to use scales so that there is variation in the responses obtained. For example, instead of soliciting a "yes" or "no" answer to the question of "Were the police dishonest," it's more useful for analytical purposes to ask, "Would you say you 'agree strongly,' 'agree,' 'disagree,' or 'disagree strongly'?" Also, breaking scales up into smaller questions can help simplify the response format. For instance, the researcher could ask a question with one of two possible answers (for example, "Is the person honest or dishonest"), and then depending on that answer, ask a follow-up question with scales that measure levels of dishonesty (for example, "very dishonest," "somewhat dishonest") (Tyler, 2009). This allows respondents to make a series of simpler judgments.

Measuring compliance is also challenging and requires appropriate scaling. During the first wave of the Chicago study, it became clear that people did not want to admit to illegal behavior. For example, when asked, "Have you taken inexpensive items from stores without paying for them," all

1,575 respondents indicated “never,” suggesting that shoplifting never occurs. Therefore, scaling was introduced to the questionnaire for the second wave to capture not simply whether someone did something wrong or not, but rather if they broke the law “almost never” or “practically almost never,” and so on. By differentiating more at the “never” end of the scale it was possible to capture more variance in self-reported behavior.

Overall, measuring peoples’ compliance behaviors through self-reporting is limited in that behavior is not directly observed, but it nonetheless remains useful if no direct evidence of behaviors is available. Evidence of compliance behaviors provided by others, including legal authorities, is one way of compensating for this limitation (Tyler, 2009). Tyler, Sherman, Strang, Barnes, and Woods (2007), for example, have used police arrest data to index compliance. Another common, useful technique is asking about one’s friends or peers – “How many of your friends use heroin (or shoplift, and so on)?” – and use that indirect measure as an index of the person’s own behavior or to more accurately estimate population prevalence. The idea is that when estimating what others are doing they use their own behavior as a guide. And because they are not being asked directly about themselves, self-presentation issues are less salient and responses are more accurate.

Mechanisms Through Which Law Affects Public Health

The roles of procedural justice and legitimacy as mechanisms through which law influences public health are captured in Figure 6.1. Path A captures the behavior of public health authorities toward citizens and groups in terms of the core dimensions of procedural justice (impartiality, transparency, respect, fairness). Such authorities may be individual agency personnel tasked with law enforcement or organizations that have the authority and responsibility to create and sustain healthy corporate environments for workers. Path B represents the legitimacy (obligation, trust, and confidence) of legal authorities, which flows from their procedurally just character, and with the existence of system legitimacy, people are motivated to comply with the law (path C).

The type of motivation captured here is internally driven and value-based (as opposed to instrumentally driven and based on the threat of punishment or the receipt of incentives). On the basis of this motivation, people comply with the law (path E), thereby undertaking the prescribed healthy behaviors (path G) that affect different public health outcomes (fewer deaths, fewer injuries, lower rates of communicable disease) (path I) depending on the area of intervention. We also reviewed studies pointing to the role of procedural justice, trust, and ultimately legitimacy in reducing stress (path D). Less stress can yield direct health benefits such as fewer psychiatric disorders (path H), and it can also lead to healthier behaviors including drinking less often (path F), which in turn contributes to population-level health outcomes (path I) such as lower death rates from impaired driving.

The various paths in this causal diagram point to areas of needed empirical research. While the mechanisms discussed here are theoretically grounded in a range of empirical contexts, including compliance with criminal laws and the associated outcome of public safety, attention should be placed more squarely on factors shaping compliance with public health directives. The diagram presented here provides a framework for conceptualizing research questions in this area, ones that will require the development of appropriate instruments for measuring peoples' experiences with, and attitudes toward, public health authorities.

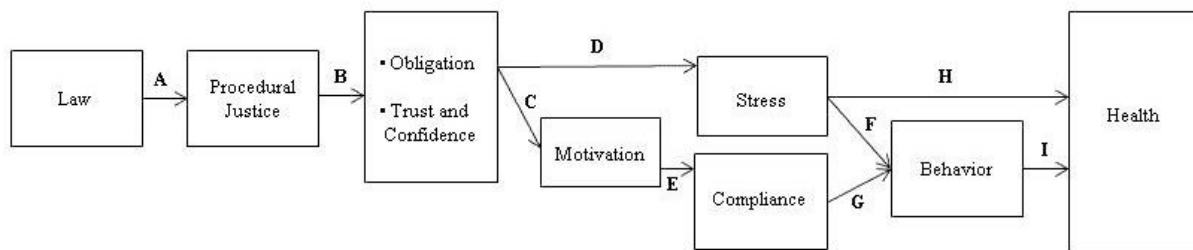


Figure 6.1. Procedural Justice Mechanisms Through Which Law Affects Public Health.

Conclusion

This chapter has discussed changes in health behavior that are motivated by attitudes and values. This is in contrast to behavior that has to be coerced. Self-regulation is activated when people believe that legal authorities are legitimate, but such legitimacy cannot be assumed. Many public health directives are paternalistic, asking individuals to change behaviors that are personally gratifying and that may pose no direct threat to the health of others. Gaining compliance with them requires legitimacy. That legitimacy could be the legitimacy of science and/or the legitimacy of government. Therefore, failure to build legitimacy with either of these sources of authority not only undermines compliance with a particular law but risks undermining the overall legitimacy of the entire public health system of regulation and advice.

Research on compliance has shown that legal authorities can gain a great deal in terms of legitimacy when they follow clear norms of procedural justice, including impartiality, transparency, and respect for human dignity (Tyler, 2003). Questions about the role of procedural justice in shaping system legitimacy warrant greater attention in legal epidemiology, as do questions about the effects of legitimacy on health behaviors. Public health agencies can attend to procedural fairness and legitimacy not only in the actual enforcement of the law but also in the formulation of behavioral guidance (such as recommended vaccination schedules). The logic model presented

here offers a framework for studying law's effect on public health through the mechanisms of procedural justice and legitimacy.

The most relevant empirical evidence on procedural justice as a mechanism for shaping health behaviors comes from studies conducted in organizational settings. A number of studies show that creating procedurally just organizations enhances the physical and mental health of people within those organizations. A key question for legal epidemiology is whether government should mandate the use of fair procedures and the creation of a climate of ethicality in an effort to produce desirable health outcomes within both public and private organizations.

In summary, the law can shape health-related behavior through providing incentives for healthy behavior and sanctions for unhealthy behavior. However, the argument we are making, drawing upon the literature on self-regulation, is that the best approach is to promote favorable attitudes and values, changing what people feel they should do with respect to their health behaviors. This involves creating trust and confidence in health authorities. How precisely this should be done in relation to various health behaviors is an important area of empirical inquiry.

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