

The Complexity of Disentangling Intrinsic and
Extrinsic Compliance Motivations: Theoretical
and Empirical Insights from the Behavioral
Analysis of Law

Yuval Feldman *

TABLE OF CONTENTS

I. INTRODUCTION.....	12
II. EXPRESSIVE LAW AND MULTIPLE COMPLIANCE MOTIVATION	16
A. <i>Dichotomous Compliance Motivations</i>	16
B. <i>Complex Compliance Motivations</i>	18
C. <i>Mutual Influence Between the Models</i>	19
D. <i>Crowding-Out</i>	23
E. <i>Misperception of What Motivates Self vs. Others</i>	29
III. IMPLICATIONS FOR LEGAL POLICY MAKING	36
A. <i>Framing of Legal Incentives</i>	37
B. <i>Differentiated Regulation and Individual Differences:</i> <i>Heterogeneity in Intrinsic Motivations</i>	40
C. <i>Law vs. Money</i>	43
D. <i>Entitlement and Endowment Effect</i>	44
E. <i>The Potential Contribution of Legal Uncertainty</i>	46
IV. SUMMARY AND CONCLUSION.....	47
A. <i>What is the Nature of the Behavior?</i>	49

* Professor of Law, Bar Ilan University. Some of the findings reported in this Article are based on joint studies conducted with the following scholars: Robert Cooter, Alon Harel, Shahar Lifshitz, Orly Lobel, Oren Perez, Doron Teichman, and Tom Tyler. For comments: Tsilly Dagan, Rebecca Hollander-Blumoff, Shachar Lifshitz, and Jacob Nussim. Statistical consulting: Tammy Shterental. Research assistants: Iddo Novegodzki & Assaf Unger. Special thanks to Rebecca Hollander-Blumoff for her useful and insightful comments. *See* Rebecca Hollander-Blumoff, *Intrinsic and Extrinsic Compliance Motivations: Comment on Feldman*, 35 WASH. U. J.L. & POL'Y 53 (2011). Thanks also to Professor Marion Crain and Professor Kimberly Krawiec for organizing this wonderful symposium as well as to the editors of the *Washington University Journal of Law & Policy* for their hard work.

<i>B. From What Proportion of the Target Population Do We Need Cooperation?</i>	49
<i>C. How Important Is It that You Think that Others Are Being Motivated by Intrinsic Motivations?</i>	50
<i>D. How Measurable is the Behavior?</i>	50

I. INTRODUCTION

One of the central distinctions in the literature with regard to the behavioral function of the law is between “intrinsic” and “extrinsic” motivations.¹ Extrinsic motivation is linked to actions that are driven by external commands or incentives. Conversely, intrinsic motivation is found when the behavior is chosen from within the individual, usually out of a sense of moral or civic duty.² This Article will attempt to improve our understanding of the interrelationship between love and money in a legal context, through a discussion of a series of theoretical dilemmas related to the interplay between intrinsic and extrinsic compliance motivations. For the most part, researchers who have worked within the behavioral analysis of legal scholarship have not focused on love, but rather on other intrinsic motivations, such as trust, morality, and pro-social motivations. Love, however, as one of the most basic intrinsic motivations, can benefit from the insights explored in the more general context of such other intrinsic motivations. Similarly, expanding the discussion from money to monetary instruments such as fines, deposits, and rewards, as well as other non-monetary legal instruments such as imposing a duty, could improve both the theoretical basis of the discussion and the empirical data available.

1. See generally Edward L. Deci & Richard M. Ryan, *The “What” and “Why” of Goal Pursuits: Human Needs and the Self-Determination of Behavior*, 11 PSYCHOL. INQUIRY 227 (2000) (establishing general distinctions between extrinsic and intrinsic motivation).

2. Originally, most discussions of intrinsic motivation were done within the context of interest in the task. See generally Edward L. Deci, Richard Koestner & Richard M. Ryan, *A Meta-Analytic Review of Experiments Examining the Effects of Extrinsic Rewards on Intrinsic Motivation*, 125 PSYCHOL. BULL. 627 (1999) (describing the research approach and results from a number of studies on intrinsic motivation); Tim Kasser & Richard M. Ryan, *Further Examining the American Dream: Differential Correlates of Intrinsic and Extrinsic Goals*, 22 PERSONALITY & SOC. PSYCHOL. BULL. 280 (1996) (examining the differences in well-being of the individual associated with focusing on extrinsic and intrinsic goals).

The Article will be divided into two main parts. The first part will focus on three bodies of literature which provide the basic theoretical view of how intrinsic and extrinsic compliance motivations interact.³ The second part of the Article will focus on the normative implications of this theoretical point of view, leading to some tentative policy suggestions as to how to countervail some of the disruptive effects of monetary considerations, while still maintaining people's intrinsic commitment toward socially desirable behavior.

While the distinction between these two types of motivation seems to have been taken for granted in numerous studies, there are a few basic questions that remain unsettled, some of which will be discussed in this Article. The first is a definitional question which attempts to understand which motivations fall within intrinsic motivations and which fall under the category of extrinsic motivations. While the concept of intrinsic motivation originally focused on some inherent interest in a task,⁴ it has long since been expanded, especially in economics and legal scholarship, to include numerous other intrinsic motivations such as morality, duty, legitimacy, fairness, loyalty, identity, and potentially love as well. Similarly, external motivations were expanded to include not only monetary rewards, but also various legal, verbal, social, and organizational mechanisms which attempt to cause people to engage in socially desirable behaviors. Accounting for the variety of motivations which are treated as either extrinsic or intrinsic should be part of any attempt to generalize from an empirical study to a broader theoretical argument. Understanding the nature of intrinsic and extrinsic motivation leads us to our next question regarding the mutual influence of internal and external motivations.

There is an ongoing heated debate in the behavioral literature as to how these two types of motivations interact.⁵ One of the main purposes of this review is to demonstrate the difficulty one faces when attempting to understand the complex nature of the relationship

3. Due to both space constraints and a need to maintain the focus of the Article, literature that focuses more on the sociological aspects than on behavioral perspectives, such as commodification and destruction of social capital, will not be examined in this Article.

4. See Deci, Koestner & Ryan, *supra* note 2, at 635.

5. See, e.g., Deci & Ryan, *supra* note 1, at 235–37.

between these two types of motivations. While some view extrinsic rewards as undermining intrinsic motivation, others find that the two mechanisms can be mutually reinforcing.⁶

The first part of this Article will present these two conflicting views in the literature, with an obvious emphasis on legal contexts. We will start with the expressive literature, which seems to be the leading one in its ability to account for multiple compliance motivations, and then move to the “crowding-out” literature, which is the dominant literature in accounting for the conditions under which extrinsic motivations undermine intrinsic ones.

The expressive law literature focuses on social norms’ mediated effect of law on behavior. This body of literature attempts, in part, to examine how the traditional function of the law, namely deterrence, can coexist with its expressive attempts to inform and educate the public as to what is socially and morally desirable.⁷ Naturally, the type of quandaries addressed within this literature could shed light on the possibility of an extrinsic motive (e.g., deterrence) to improve rather than disrupt the functioning of a more “intrinsically-related” compliance motivation (e.g., morality).

The second strand of literature which we will review is the “crowding-out” literature. This literature originated in psychology, flourished in economics, and was recently imported into the legal scholarship. Most of the research conducted in this context focuses on how external incentives, particularly money, may undermine people’s reliance on their internal motives.⁸ While this type of

6. The debate about the type of effect of extrinsic motivations on intrinsic ones and its various dimensions and aspects should be seen as one between the expressive law literature and the crowding-out literature. Even Edward Deci, the “father” of the crowding-out theory, recognizes that in many cases, external rewards may enhance intrinsic motivations, and that there is an importance attached to aspects such as interpersonal contexts and verbal cues as to how to interpret an extrinsic reward. See Deci, Koestner & Ryan, *supra* note 2, at 628 (discussing the conflicting effects of extrinsic motivations). Even within the scholarship of expressive law, and especially within the norms and legal scholarships, there is recognition of how sanctions and penalties may send erroneous signals as to the value of engaging in a given behavior. For a recent demonstration, see Alex Raskolnikov, *Revealing Choices: Using Taxpayer Choice to Target Tax Enforcement*, 109 COLUM. L. REV. 689, 695–99 (2009).

7. Yuval Feldman & Orly Lobel, *The Incentives Matrix: The Comparative Effectiveness of Rewards, Liabilities, Duties, and Protections for Reporting Illegality*, 88 TEX. L. REV. 1151, 1183 (2010).

8. See, e.g., Deci, Koestner & Ryan, *supra* note 2, at 627.

research may suggest that any form of monetary incentive may undermine the ability of love to motivate behavior, a closer look at the factors that moderate the effect of monetary incentives on intrinsic motivations may suggest a more multifaceted and nuanced effect than one might assume.

Finally, we will review the literature on biases related to both the perception of what others are doing and their motivations. Through this review, the Article will demonstrate that, for the most part, there is a consistent gap between the likelihood of attributing intrinsic motivation to one's own behavior and that of others. In contrast to the previous two sections, which directly address the influence of extrinsic controls over intrinsic motivation, this third section dealing with relevancy is more indirect. Nevertheless, the existence of such a gap creates a whole range of possibilities as to how mutual biases of parties in relationships affect the dominant motivation in a given relationship.

The second part of the Article will use the theoretical structures developed in the first part to explore a few related empirical studies that I had a part in conducting. Based on these empirical studies, I will suggest some tentative behaviorally-informed policy dilemmas.

First, in which contexts would enacting a law be viewed as having a similar effect to that of imposing monetary incentives? Or, to frame the question differently, does law always carry a similar effect to money with regard to non-instrumental activities?

Second, moving from the effect of law to the effect of money, are there creative ways to portray the motivations associated with the presentation of money in order to help disassociate some of its disruptive effects? What is the potential contribution of framing effects in this matter? Is the effect expected to be similar in all people? How do people view the effect of extrinsic motivation on the intrinsic motivation of others?

Finally, the Article will demonstrate how the existence of legal uncertainty could reduce part of the "crowding-out" effect associated with extrinsic motivation by creating some *ex ante* veil on the legal consequences of people's behavior.

The Article will conclude with some of the main factors that the policymaker should take into account, using extrinsic measures, when

examining how best to address an individual's intrinsic motivation in different social and legal settings.

II. EXPRESSIVE LAW AND MULTIPLE COMPLIANCE MOTIVATION

The expressive law literature is the primary literature that deals extensively with the existence of competing models of what motivates legal compliance. This body of literature attempts, in part, to examine how the traditional function of the law, namely deterrence, can coexist with its expressive attempts to inform and educate the public as to what is socially and morally desirable. Naturally, the type of dilemmas addressed within this literature can shed light on the ability of intrinsic and extrinsic motivation to function simultaneously in motivating individuals in relationships and in other legal contexts. The interest in these questions becomes more important due to the developments in behavioral assumptions underlying rationality⁹ and the emergence of social norms literature¹⁰ within the behavioral analysis of law literature.

A. Dichotomous Compliance Motivations

In the past, most of the research regarding compliance motivation was dichotomous in nature, with most of the discussion focused on

9. See Russell B. Korobkin & Thomas S. Ulen, *Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics*, 88 CALIF. L. REV. 1051, 1053–57 (2000) (analyzing the use of rationality theory and how it can be utilized in law to encourage socially desirable conduct); Christine Jolls, Cass R. Sunstein & Richard Thaler, *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471, 1473 (1998) (proposing an “approach to the economic analysis of law that is informed by a more accurate conception of choice, one that reflects a better understanding of human behavior and its wellsprings”).

10. See Lisa Bernstein, *Merchant Law in a Merchant Court: Rethinking the Code's Search for Immanent Business Norms*, 144 U. PA. L. REV. 1765, 1787–88 (1996) (noting that both law and society literature document when a contractual relationship may not be the same as the legal rights in the contract based on the parties' acceptance of these changes because of social norms or commercial custom); Cass R. Sunstein, *Social Norms and Social Roles*, 96 COLUM. L. REV. 903, 907 (1996) (arguing that norm management has an important place in law; that “behavior is pervasively a function of norms; . . . that changes in norms might be the best way to improve social well-being; and that government deserves to have, and in any case inevitably does have, a large role in norm management”); ROBERT C. ELLICKSON, *ORDER WITHOUT LAW: HOW NEIGHBORS SETTLE DISPUTES* (1991) (describing how neighbors settle disputes using informal norms and how these norms are generated).

which regulatory approach was more likely to lead to effective results. Deterrence, which seems to be most similar to extrinsic motivation, was the subject of most of the research.¹¹ One of the most popular lines of research within this literature is related to the view that deterrence cannot account for the level of compliance seen today.¹² In that regard, the most common response is to supplement deterrence with intrinsic factors—mainly duty, legitimacy, and morality.¹³ Indeed, many of the studies within this tradition focus not only on the limits of deterrence but also on the comparison of which of the mechanisms, deterrence or morality, is more effective in changing one's behavior.¹⁴

11 See, e.g., CHARLES R. TITTLE, *SANCTIONS AND SOCIAL DEVIANCE: THE QUESTION OF DETERRENCE* (1980); FRANKLIN E. ZIMRING & GORDON J. HAWKINS, *DETERRENCE: THE LEGAL THREAT IN CRIME CONTROL* (1973); Matthew Silberman, *Toward a Theory of Criminal Deterrence*, 41 AM. SOC. REV. 442, 442–43 (1976).

12 See Raymond Paternoster & Leeann Iovanni, *The Deterrent Effect of Perceived Severity: A Reexamination*, 64 SOC. FORCES 751, 768–69 (1986) (arguing that both severity and certainty of punishment cannot account for any effect on delinquent behavior). Others are more modest in their arguments, but still demonstrate, through a review of many empirical studies, that deterrence cannot account for compliance. See, e.g., John Braithwaite & Toni Makkai, *Testing an Expected Utility Model of Corporate Deterrence*, 25 LAW & SOC'Y REV. 7, 8–10, 29 (1991). Others have suggested that the problem was not motivational but rather cognitive, as people are not really cognizant of the law on the books. See, e.g., Paul H. Robinson & John M. Darley, *Does Criminal Law Deter? A Behavioural Science Investigation*, 24 OXFORD J. LEGAL STUD. 173, 175–78 (2004).

13 See generally Tom R. Tyler & Jeffrey Fagan, *Legitimacy and Cooperation: Why Do People Help the Police Fight Crime in Their Communities?*, 6 OHIO ST. J. CRIM. L. 231 (2008) (discussing legitimacy as an encouragement to comply with the law); James L. Gibson, *The Legitimacy of the U.S. Supreme Court in a Polarized Polity*, 4 J. EMPIRICAL LEGAL STUD. 507 (2007) (discussing how legitimacy can explain the continued loyalty to the Supreme Court); Michael Wenzel, *The Impact of Outcome Orientation and Justice Concerns on Tax Compliance: The Role of Taxpayers' Identity*, 87 J. APPLIED PSYCHOL. 629 (2002) (examining justice considerations in explaining tax compliance). For an empirical demonstration of the limits of traditional economic models in the context of legal compliance, see Yuval Feldman & Doron Teichman, *Are All Legal Probabilities Created Equal?*, 84 N.Y.U. L. REV. 980, 985–86 (2009).

14 For a classical, although criticized, study that takes this approach and demonstrates the advantage of morality over deterrence in encouraging honesty in tax reports, see Richard D. Schwartz & Sonya Orleans, *On Legal Sanctions*, 34 U. CHI. L. REV. 274, 283, 299 (1967). For a more general discussion, see *supra* note 12 and accompanying text.

B. Complex Compliance Motivations

More sophisticated models have abandoned the “which is better” approach and instead focus on creating a model that accounts for an interplay between both extrinsic and intrinsic motivations. Two main changes can be identified within this approach. First, today’s models have far more than two types of motivation, as was the case with the more traditional scholarship. Second, we see the inclusion of types of motivation which could not be easily defined as either extrinsic or intrinsic. A classical demonstration of this approach can be seen in the work of Rob MacCoun on the dilemma of the legalization of marijuana.¹⁵ MacCoun presents, in a very systematic way, how multiple motivations and perceptions of behavior react to an announcement that a certain behavior is a criminal act.¹⁶ In the behavioral model that he develops, there are far more than two different types of motivations that take place in the decision of individuals to obey a given regulation.¹⁷ Indeed, it is common today to speak of a much larger number of competing compliance motivations. The interesting point in that regard is that many of these new models could not be categorized under either intrinsic or extrinsic motivations.

A classical example of the inability to fully determine whether a motivation should be treated as extrinsic or intrinsic comes from the socially motivated individual who obeys the law according to what he or she believes others are doing.¹⁸ Within this compliance model, we have both intrinsic and extrinsic aspects of motivation. On the extrinsic level, models of reputation, signaling, and social enforcement are obviously external to the individual.¹⁹ On the other hand, social and group identities are deeply related to the conception

15. Robert J. MacCoun, *Drugs and the Law: A Psychological Analysis of Drug Prohibition*, 113 PSYCHOL. BULL. 497 (1993).

16. *Id.* at 497–506.

17. *Id.* at 506–08.

18. For further discussion of the relationship between social and other alternative compliance motivations, see Yuval Feldman, *Five Models of Regulatory Compliance Motivation: Empirical Findings and Normative Implications*, in THE HANDBOOK OF THE POLITICS OF REGULATION (David Levi-Faur ed., forthcoming 2011).

19. See generally Eric A. Posner, *The Regulation of Groups: The Influence of Legal and Nonlegal Sanctions on Collective Action*, 63 U. CHI. L. REV. 133, 138–43 (1996).

of self²⁰ and, therefore, should be defined as intrinsic. Thus, portraying the social perspective as extrinsic or intrinsic will only provide a partial account for the true meaning of one's behavior.

A similar definitional confusion arises with regard to fairness, which is usually viewed under a dichotomous approach as an intrinsic factor,²¹ but under a more sophisticated view could be viewed as a factor that has both intrinsic and extrinsic characteristics.²² Some argue that care for procedural fairness could be explained by identity-related considerations,²³ while others focus on theories such as the "Fairness Heuristics Theory"²⁴ that suggests that care for procedural justice is motivated by the need to approximate the likelihood of getting a satisfactory result.

C. Mutual Influence Between the Models

Many compliance models cannot be easily defined as driven by either extrinsic or intrinsic motivation. It is also not always clear whether these two types of motivations can function simultaneously. The majority of scholars, even those who come from the tradition of law and economics, are willing to accept the possibility of simultaneous functioning, without giving too much attention to the mutual influences of these motivations. For example, when Professor Robert Cooter discusses his view of the expressive function of the law, he illustrates what he views as the three main models of compliance, without giving much attention to the mutual influence

20. Roy F. Baumeister & Mark R. Leary, *The Need to Belong: Desire for Interpersonal Attachments as a Fundamental Human Motivation*, 117 PSYCHOL. BULL. 497, 497–98 (1995).

21. See generally Daniel Kahneman, Jack L. Knetsch & Richard Thaler, *Fairness as a Constraint on Profit Seeking: Entitlements in the Market*, 76 AM. ECON. REV. 728 (1986).

22. E. Allan Lind, Ruth Kanfer & P. Christopher Earley, *Voice, Control, and Procedural Justice: Instrumental and Noninstrumental Concerns in Fairness Judgments*, 59 J. PERSONALITY & SOC. PSYCHOL. 952, 953 (1990).

23. TOM R. TYLER, ROBERT J. BOECKMANN, HEATHER J. SMITH & YUEN J. HUO, SOCIAL JUSTICE IN A DIVERSE SOCIETY 98 (1997).

24. For a discussion of the psychology of procedural and distributive justice viewed from the perspective of fairness heuristic theory, see E. Allan Lind, *Fairness Heuristic Theory: Justice Judgments as Pivotal Cognitions in Organizational Relations*, in ADVANCES IN ORGANIZATIONAL JUSTICE 56 (Jerald Greenberg & Russell Cropanzano eds., 2001); Kees van den Bos, E. Allan Lind & Henk A. M. Wilke, *The Psychology of Procedural and Distributive Justice Viewed From the Perspective of Fairness Heuristic Theory*, 2 JUSTICE IN THE WORKPLACE: FROM THEORY TO PRACTICE 49 (Russell Cropanzano ed., 2001).

between extrinsic and intrinsic models.²⁵ Similar perspectives can be seen in the work of Professor Richard McAdams regarding the relationship between formal law and social norms.²⁶ Even classical social psychologists like Herbert Kelman accept the existence of models where intrinsic and extrinsic motivations are both expected to be triggered (and thus function) simultaneously under the law and yet do not acknowledge their potential mutual influence.²⁷

Nonetheless, the aspect that seems to be somewhat undeveloped in each of the models above is the mutual influence between internal and external motivation. In that regard, one such dynamic that has received a lot of attention is how deterrence can change people's

25. Robert D. Cooter, *Three Effects of Social Norms on Law: Expression, Deterrence, and Internalization*, 79 OR. L. REV. 1, 21 (2000).

Laws that have all three parts potentially have all three consequences. To illustrate, consider promulgating a law prohibiting a particular pollutant. The new law's pronouncement may make polluters expect that others will abate. If more abatement increases the social pressure on polluters, then the change in expectations might cause a jump to a new equilibrium (*expressive effect*). In addition, when the state attaches a sanction to polluting, some polluters will abate to avoid the sanction (*deterrence effect*). Finally, the legal explanation for this new obligation may convince some people to change their values and prefer to abate (*internalization effect*).

Id. at 21 (emphasis added).

It seems clear from the literature that economists would strongly prefer a single, unified way of introducing moral considerations into economic decision making Absent a major conceptual breakthrough, not in evidence in the literature reviewed, it seems likely that, in the end, a successful incorporation may require something beyond treating moral factors as *only* decision rules or *only* constraints or *only* preferences.

William B. Griffith & Robert S. Goldfarb, *Amending the Economist's "Rational Egoist" Model to Include Moral Values and Norms, Part 2: Alternative Solutions*, in SOCIAL NORMS AND ECONOMIC INSTITUTIONS 59, 79–80 (Kenneth J. Koford & Jeffrey B. Miller eds., 1991).

26. "[B]y norms this literature refers to informal social regularities that individuals feel obligated to follow because of an internalized sense of duty, because of a fear of external non-legal sanctions, or both." Richard H. McAdams, *The Origin, Development, and Regulation of Norms*, 96 MICH. L. REV. 338, 340 (1997) (second emphasis added).

27. See Herbert C. Kelman, *Compliance, Identification, and Internalization: Three Processes of Attitude Change*, 2 J. CONFLICT RESOL. 51, 53 (1958).

In any given instance, he may adhere to a rule or law out of compliance (he may obey the speed limit, for example, in order to avoid a traffic ticket), but he may have a general attitude of respect for a body of rules (such as the legal system) based on internalization, or a general self-image of a law-abiding citizen, based on identification.

HERBERT C. KELMAN & V. LEE HAMILTON, CRIMES OF OBEDIENCE 114 (1989).

moral evaluation of an act. Zimring and Hawkins²⁸ examine how punishment, traditionally seen as the price of doing the punished activity, may teach right and wrong²⁹ (morality/internalization), habit building (internalization), and respect for the law (citizenship), as well as promote conformity (price).³⁰

Along those lines, in their research, Williams and Hawkins have reviewed the various studies and methodologies used to account for the effect of deterrence.³¹ While recognizing many of the limitations of current methodologies in separating the effect of deterrence from other factors that may be part of the behavioral effect, following a theoretical analysis conducted by others, such as Jack P. Gibbs, they suggest various constructs that may be affected by formal deterrence.³² They argue that the factors affected by formal deterrence include enculturation (respecting authorities), moral condemnation, and normative validation (seeing that others are being punished).³³

28. See ZIMRING & HAWKINS, *supra* note 11, at 74–88.

29. Fuller questions this perspective: “The notion that its authorization to use physical force can serve to identify law and to distinguish it from other social phenomena is a very common one in modern writings.” LON L. FULLER, *THE MORALITY OF LAW* 108 (rev. ed. 1969). While Fuller himself does not take this view, the fact is, as even Fuller admits, the ability to use force is part of what distinguishes a legal norm from a social norm. That means that the deterrence has to be perceived to some extent in order for people to realize that there is a law, and thus treat the announcement of the law as a legal act. Fuller himself does not think that ability to compel should be seen as one of the characteristics of the law. *Id.* He argues that focusing on hierarchies of law and the application of force does not take into account the important aspects of internal morality of the law, what should be the right solution, and so forth. *Id.* at 110–12.

30. One of the most surprising omissions is consensus in its prevalence form (as opposed to desirability). Elsewhere, I challenge this omission by illustrating that consensus has a greater mediating ability than price in the law’s function as an educating principle. See Yuval Feldman, *The Expressive Function of Trade Secret Law: Legality, Cost, Intrinsic Motivation, and Consensus*, 6 J. EMPIRICAL LEGAL STUD. 177, 200–03 (2009). It is interesting to note that in their earlier writings, Zimring and Hawkins attempted to speculate on the possible means by which price, morality, and consensus interact from the perspective of state-initiated social control. See Frank Zimring & Gordon Hawkins, *The Legal Threat as an Instrument of Social Change*, 27 J. SOC. ISSUES 33 *passim* (1971).

31. Kirk R. Williams & Richard Hawkins, *Perceptual Research on General Deterrence: A Critical Review*, 20 LAW & SOC’Y REV. 545 (1986) (presenting the various studies on deterrence and arguing that the findings are questionable because of a failure to recognize the complexity of the perceptual process).

32. See generally JACK P. GIBBS, *CRIME, PUNISHMENT, AND DETERRENCE* (1975).

33. See Williams & Hawkins, *supra* note 31, at 562.

In that regard, a classical demonstration of the effect of extrinsic motivations on intrinsic ones comes from Schwartz and Orleans, who have studied the interrelationship between fear of punishment and social duty. They have shown that those who were “in a fear of punishment” group were more likely to feel normative obligations to pay taxes.³⁴ Furthermore, evidence also exists for the opposite view, where intrinsic motivation affects an extrinsic one. Professors Scholz and Pinney have found that those with a stronger internal propensity to pay taxes had an increased perception as individuals that they are likely to be audited.³⁵

Overall, expressive models confuse the interrelationship between intrinsic and extrinsic motivations. Some scholars believe they complement each other, and some think they are substitutes. Thus, while these studies systematically explored the dynamics of the relationship between intrinsic and extrinsic motivations, the contradictory discussion of these mutual influences in studies that measure compliance demonstrates how complex it is to account for the influence between these two types of motivations.³⁶ Lacking a clear and consistent account of the dynamics between intrinsic and extrinsic motivation will always undermine the coherence of any attempt to model the effect of law on behavior. Presumably, the next subsection, which focuses on “crowding-out,” is a good demonstration of such an attempt, although the limits of this type of scholarship will be highlighted throughout its review.

34. Schwartz & Orleans, *supra* note 14, at 299–300. Paternoster and Iovanni found that perceived severity of deterrence did not have a deterrent effect. See Paternoster & Iovanni, *supra* note 12, at 768–70.

35. John T. Scholz & Neil Pinney, *Duty, Fear, and Tax Compliance: The Heuristic Basis of Citizenship Behavior*, 39 AM. J. POL. SCI. 490, 491 (1995). This is actually a correlation, not an interaction between the effects of moral duty and deterrence on intention to comply. See MacCoun, *supra* note 15, at 503–04 (focusing on the individual difference dimension and suggesting that the interaction between moral duty and deterrence flows in the opposite direction).

36. In a later paper, by comparing the responses of people with a comparable sense of duty to comply, Scholz and Lubell show that fear of punishment has an effect on compliance. See John T. Scholz & Mark Lubell, *Trust and Taxpaying: Testing the Heuristic Approach to Collective Action*, 42 AM. J. POL. SCI. 398, 405–13 (1998).

D. Crowding-Out

The second literature that we will review in the process of understanding the interaction between love and money is the crowding-out literature. Most of the research conducted within this line of inquiry focuses on how and when external incentives (with a particular though not exclusive focus on money) may undermine people's internal motives.³⁷

It should be noted, however, that while the crowding-out literature is the leading one in this context, there are related paradigms that suggest similar results while relying on alternative theoretical structures. For example, Heyman and Ariely study the effect of money on behavior.³⁸ In their paper, they explore how the type of external incentive (money vs. candy) provides signals to people as to the type of their relationships.³⁹ According to Fiske's relational theory,⁴⁰ Heyman and Ariely suggest that some external incentives may have completely different impacts, based on the context they give to a situation.⁴¹ While in monetary markets, there is a direct relationship between money and effort; in social markets, by contrast, the correlation between effort and compensation is less clear. This line of research demonstrates the importance of fairness and context in accounting for the effect of incentives on intrinsic motivation.⁴² Using a different paradigm, Professors Vohs, Mead, and Goode employ mental priming techniques to study the unconscious effect of thinking about money.⁴³ They demonstrate that thinking about money causes people to feel a greater sense of self-sufficiency, characterized by both a desire to not depend on others and a desire not to have

37. There are many studies within this tradition that focus on extrinsic motivations, such as deadlines. Deci, Koestner & Ryan, *supra* note 2, at 627. Furthermore, much of the research in this line of reasoning has compared tangible and intangible external rewards, with a particular focus on comparing verbal and monetary incentives. *See, e.g., id.* at 656–57.

38. James Heyman & Dan Ariely, *Effort for Payment: A Tale of Two Markets*, 15 *PSYCHOL. SCI.* 787 (2004).

39. *Id.* at 787–89.

40. *See id.* at 792; *see also* Alan P. Fiske, *The Four Elementary Forms of Sociality: Framework for a Unified Theory of Social Relations*, 99 *PSYCHOL. REV.* 689 (1992).

41. Heyman & Ariely, *supra* note 38, at 792.

42. *Id.* at 792–93.

43. Kathleen D. Vohs, Nicole L. Mead & Miranda R. Goode, *The Psychological Consequences of Money*, 314 *SCIENCE* 1154 (2006).

others depend on them. Illustrating that money diminishes relations between friends and family, they argue that money enhances individualism but diminishes communal motivations.⁴⁴

Thus, the view that money undermines intrinsic motivation is shared not only by the “crowding-out” literature, but also by other lines of reasoning. Nevertheless, while one might interpret this fact to suggest that any form of monetary incentive may undermine the ability of intrinsic motivation (or love) to motivate behavior, a focus on the factors that moderate the effect of monetary incentives on intrinsic motivations may suggest a more multifaceted effect than one might assume.

The “crowding-out” literature suggests two competing behavioral explanations for the fact that, in many contexts, external motivation may undermine people’s ability to rely on intrinsic motivation. The first and most studied model is related to motivation and was named the “Cognitive Evaluation Theory” (“CET”) by Deci and Ryan.⁴⁵ According to this perspective, when the individual views a reward as controlling, the reward harms the need for autonomy. In contrast, when the reward is viewed as providing satisfaction, it increases the need for competence.⁴⁶ Based on this main distinction, CET serves as the basis for various predictions, such as the difference between verbal and tangible rewards.⁴⁷ Although less central, the other behavioral explanation that accounts for the crowding-out effect is attribution. According to this theoretical perspective, external rewards create an over-justification effect whereby people assume that their deeds are due to the external rewards and not owing to their intrinsic motivations.⁴⁸

Social psychologists examining environmental morale have also discussed the crowding-out effect of extrinsic rewards on intrinsic

44. *Id.* at 1154–56.

45. Edward L. Deci & Richard M. Ryan, *The Empirical Exploration of Intrinsic Motivational Processes*, 13 *ADVANCES EXPERIMENTAL SOC. PSYCHOL.* 39, 61 (1980).

46. *Id.* at 67–68.

47. Deci, Koestner & Ryan, *supra* note 2, at 638.

48. See, e.g., E. Tory Higgins & Yaacove Trope, *Activity Engagement Theory: Implications of Multiply Identifiable Input for Intrinsic Motivation*, in 2 *HANDBOOK OF MOTIVATION AND COGNITION: FOUNDATIONS OF SOCIAL BEHAVIOR* 229, 240–43 (Richard M. Sorrentin & E. Tory Higgins eds., 1990).

motivation, calling it the “hidden cost of reward.”⁴⁹ First, social psychologists suggest that one of the hidden costs of reward is a reduction in self-determination, which seems to be very similar to CET, the theory that when external awards are viewed to be controlling, the focus shifts from inside to outside the individual, thus harming one’s level of commitment. In contrast, when the external awards seem to be supportive, it increases intrinsic control as it acknowledges one’s competence.⁵⁰ Second, social psychologists note that extrinsic motivation can cause reciprocity to be violated. This second explanation is somewhat different than what is usually taken into account in psychology. According to this view, violation of reciprocity is responsible for the crowding-out effect, where a behavior that was done intrinsically is rewarded extrinsically.⁵¹

Fehr claims that when people attribute their behavior to external rewards, they discount any moral incentives for their behavior, thereby lowering the perceived effect of intrinsic motivation.⁵² For instance, paying people in return for their blood might lead donors to view the event as a transaction rather than as a charitable act, thereby decreasing altruistic blood donations.⁵³ In a series of lab-based experiments, Deci, Koestner, and Ryan found that tangible rewards undermine intrinsic motivation for a range of activities.⁵⁴ They have

49. See Bruno S. Frey & Alois Stutzer, *Environmental Morale and Motivation*, in THE HANDBOOK OF PSYCHOLOGY AND ECONOMIC BEHAVIOUR 406, 412–13 (Alan Lewis ed., 2008).

50. *Id.*

51. *Id.*

52. See, e.g., Ernst Fehr & Bettina Rockenbach, *Detrimental Effects of Sanctions on Human Altruism*, 422 NATURE 137, 140 (2003); Ernst Fehr & Simon Gächter, *Do Incentive Contracts Undermine Voluntary Cooperation?* 1 (Inst. for Empirical Res. in Econ., Working Paper No. 34, 2002); Ernst Fehr & Armin Falk, *Psychological Foundations of Incentives*, 46 EUR. ECON. REV. 687, 710 (2002). For a general review, see BRUNO S. FREY, NOT JUST FOR THE MONEY: AN ECONOMIC THEORY OF PERSONAL MOTIVATION (1997); Bruno S. Frey & Reto Jegen, *Motivation Crowding Theory: A Survey of Empirical Evidence* (CESifo, Working Paper No. 245, 2000), available at <http://ssrn.com/abstract=203330>.

53. RICHARD M. TITMUSS, THE GIFT RELATIONSHIP: FROM HUMAN BLOOD TO SOCIAL POLICY 158–64 (1971) (arguing that monetary payments to blood donors can diminish the amount of blood given voluntarily).

54. Edward L. Deci, Richard Koestner & Richard M. Ryan, *The Undermining Effect Is a Reality After All—Extrinsic Rewards, Task Interest, and Self-Determination: Reply to Eisenberger, Pierce, and Cameron (1999) and Lepper, Henderlong, and Gingras (1990)*, 125 PSYCHOL. BULL. 692, 699 (providing a meta-analysis and arguing that “it is finally clear that

argued in their research that “tangible rewards tend to have a substantially negative effect on intrinsic motivation.”⁵⁵ Therefore, they warn that attempts to externally control people’s behavior may yield considerable long-term counterproductive results.⁵⁶

In addition, an important component of this theory recognizes that the effect of incentives is not linear and that intermediate levels of incentives are the most likely to curb value-driven behavior. In the context of incentives, there is a documented difference between small, intermediate, and high payoffs, with intermediate payoffs triggering crowding-out effects most often.⁵⁷

As demonstrated, while the original crowding-out literature was the subject of numerous theoretical follow-ups and refinements, it is important to mention two methodological and theoretical insights, which seem to be forgotten in much of the secondary literature, both in economics and in law. First, most of the original studies (which were the center of this line of reasoning) focused on “level of interest” in an activity as the prototypical view of intrinsic motivation.⁵⁸ In contrast, most of the studies which were built on this tradition in economics and law focused on other types of intrinsic motivations, such as moral duty, loyalty, and identity.⁵⁹ Presumably, this difference should be attended to by those who believe that the type of intrinsic motivation may be relevant to the ease of crowding it out. A second distinction that may be relevant is whether we compare behavior with rewards to behaviors that are conducted under regimes where rewards have been removed or behaviors conducted under regimes where rewards were never present. It seems that the studies within the original crowding-out research were drawn more from the

the accepted reality of the undermining effect is in fact a reality after all”); *see also* Deci, Koestner & Ryan, *supra* note 2, at 659.

55. Deci, Koestner & Ryan, *supra* note 2, at 658–59.

56. *See id.* But *see* Robert Eisenberger, W. David Pierce & Judy Cameron, *Effects of Reward on Intrinsic Motivation—Negative, Neutral, and Positive: Comment on Deci, Koestner, and Ryan (1999)*, 125 *PSYCHOL. BULL.* 677 (1999) (“[R]eward can decrease, have no effect, or increase intrinsic motivation.”).

57. *See* Frey & Stutzer, *supra* note 49, at 418–19.

58. *See* Deci & Ryan, *supra* note 45, at 42.

59. *See, e.g.*, Fehr & Rockenbach, *supra* note 52, at 137; Fehr & Gächter, *supra* note 52, at 1; Fehr & Falk, *supra* note 52, at 688.

first type, while most of the refinements of this theory were drawn from the second type.⁶⁰

Finally, the potential effect of introducing monetary rewards depends not only on their interaction with internal motivation, but also on the conditions that are set to trigger the rewards' effect. Professors Gneezy and Rustichini used an experimental setting to explore whether fines may actually be interpreted as placing price tags on certain misconduct.⁶¹ In their study, they imposed a monetary fine on parents who were late picking up their child from a day-care center. After the introduction of the fine, they observed a steady *increase* in the number of parents coming in late.⁶² This result ran contrary to traditional deterrence models that predict that increasing the cost of an activity will necessarily decrease the rate at which it is performed. Gneezy and Rustichini suggested that the introduction of the fine may have changed parents' perception of the social dynamic between themselves and the day-care center. That is, when the act of arriving late was previously wrong in and of itself, the introduction of a fine may have allowed parents to rationalize the fine as a price for arriving late. According to this logic, as long as they paid the price for such behavior, parents felt comfortable being late.⁶³

Doron Teichman and I attempted to understand the theoretical mechanisms that undermine how framing monetary incentives can alter their function.⁶⁴ In particular, we identified three factors that caused legal payments to be viewed as prices while substituting for the intrinsic inhibition to engage in wrongdoing. One dimension we examined was related to uncertainty.⁶⁵ As in other settings, people dislike uncertainty with respect to legal payments.⁶⁶ In our study, we

60. Deci, Koestner & Ryan, *supra* note 2, at 630.

61. Uri Gneezy & Aldo Rustichini, *A Fine is a Price*, 29 J. LEGAL STUD. 1, 13 (2000).

62. *Id.* at 5–8.

63. *Id.* at 13–15.

64. Yuval Feldman & Doron Teichman, *Are All "Legal Dollars" Created Equal?*, 102 NW. U. L. REV. 223, 225 (2008).

65. *Id.*

66. See Craig R. Fox & Martin Weber, *Ambiguity Aversion, Comparative Ignorance, and Decision Context*, 88 ORGANIZATIONAL BEHAV. & HUM. DECISION PROCESSES 476, 477 (2002); Shawn P. Curley, J. Frank Yates & Richard A. Abrams, *Psychological Sources of Ambiguity Avoidance*, 38 ORGANIZATIONAL BEHAV. & HUM. DECISION PROCESSES 230, 230–31 (1986); Hillel J. Einhorn & Robin M. Hogarth, *Ambiguity and Uncertainty in Probabilistic Inference*, 92 PSYCHOL. REV. 433, 435 (1985).

demonstrated that people perceived probabilistic payments as less moral and less acceptable than defined payments.⁶⁷ “Furthermore, participants were less willing to engage in a harmful activity when a probabilistic element was added to otherwise equal legal payments.”⁶⁸

A second element we focused on was related to the timing of payment. In accordance with our predictions, paying *before* a harmful act rather than *after* reduced the negative perception of the payment and increased the willingness of people to engage in the harmful activity. “In the private setting, ex ante payments could imply consent that was granted in return for the legal payment, thereby justifying the act. Ex post payments to individuals, on the other hand, do not imply consent, and therefore sustain the perception of the act as forbidden.”⁶⁹

Finally, the third and most important factor we discovered in changing the meaning of legal payment was when it was assigned to the individual who was harmed by the act, rather than to a third party. Compensation brought the parties closer to a market-based relationship, particularly when the injured parties suffered only financial losses. In the terminology of our paper, the external incentives removed the intrinsic inhibition to cause harm to others.⁷⁰

Overall, in our study, three important factors were found to be responsible for making payments be viewed more as a price than as a fine: the timing of the payment, identity of the recipient, and certainty of the payment. When paying in advance to the injured party or after the fact but with certainty, the payment was more likely to be viewed as a price that justified ignoring the internal motivation. When payments were uncertain, made to a governmental entity, or, in

67. Feldman & Teichman, *supra* note 64, at 248. While this effect was consistent across all measures, it was not significant in all of them. The lack of significance across all measures may be explained by the fact that rational individuals were expected to strictly prefer the probabilistic option, given the fact that we held the size of the sanction constant.

68. *Id.* Similarly, uncertainty in the probability of being convicted of a crime makes people less willing to commit crimes. Uzi Segal & Alex Stein, *Ambiguity Aversion and the Criminal Process*, 81 NOTRE DAME L. REV. 1495, 1497 (2006); Alon Harel & Uzi Segal, *Criminal Law and Behavioral Law and Economics: Observations on the Neglected Role of Uncertainty in Detering Crime*, 1 AM. L. & ECON. REV. 276, 304 (1999).

69. Feldman & Teichman, *supra* note 64, at 248.

70. *Id.* at 249.

particular, made after the fact, they were more likely to be seen as fines. As legal payments shifted from the price side of the continuum to the punishment side, people began to see the payment-triggering activity as less moral, and as a result, they were less willing to engage in it.⁷¹ The importance of these dimensions was exacerbated when considering the criticism against the child care experiment. The common criticism was that fines in the experiments were too low.⁷² In our view, the perspective we took in our study enriches the understanding of factors that people view as important in making fines into payment, making it more reasonable for critics of this paradigm to accept the rationale of the surprising results of the child care study.

E. Misperception of What Motivates Self vs. Others

The last behavioral literature that could improve our understanding of how intrinsic and extrinsic motivation will interact in legal contexts and relationships is related to the gap in perception of what is the dominant motivation that underlies the behavior of self compared to the behavior of others. The importance of understanding this gap is applicable to both the relationship of and the interaction between individuals in society. In a relationship, one can easily accept the fact that when one side of a relationship believes the other is motivated by self-interest, one's own intrinsic motivation is going to be harmed. This belief leads the perceptual effect to become real. Nevertheless, even on a societal level, when people view other's behavior as being motivated by self-interest, they may respond accordingly.⁷³ Thus, if money is perceived to have a greater effect on others as opposed to oneself in the long run, the perceived motivation of others may harm one's own intrinsic motivation. It is possible that even if people underestimate the effect of money on their own

71. *Id.* at 248–50.

72. Ariel Rubinstein, *Discussion of "Behavioral Economics,"* in *ADVANCES IN ECONOMICS AND ECONOMETRICS: THEORY AND APPLICATIONS, NINTH WORLD CONGRESS* 246 (Richard Blundell, Whitney K. Newey & Torsten Persson eds., 2006).

73. For a formal demonstration of the effect of misperception on stable changes in behavior, see Robert Cooter, Michal Feldman & Yuval Feldman, *The Misperception of Norms: The Psychology of Bias and the Economics of Equilibrium*, 4 *REV. L. & ECON.* 889 (2008).

behavior, the fact that it is perceived to have an overestimated effect on others may mean that the destructive effect of money may become even more so in people's self-perception.

Indeed, many scholars have theorized that there is a strong tendency for people to think that others will engage in more selfish courses of actions, in comparison to themselves. This has actually been documented as the "Muhammad Ali Effect."⁷⁴ Simply put, it means that people are more likely to think that they are fairer than others than that they are smarter.⁷⁵ This differentiation may be explained by the fact that people's positive beliefs about themselves may be constrained by the publicity, specificity, and objectivity of the dimensions on which these beliefs are held.⁷⁶

Another important concept among the theories that support the perceptual gap with regard to ethical behavior is the norm of self-interest.⁷⁷ This concept works in conjunction with the empirically established finding that people often tend to believe that the governing social norms are instrumentally driven even when statistical analysis does not corroborate such a conviction.⁷⁸ In a long

74 See Scott T. Allison, David M. Messick & George R. Goethals, *On Being Better but Not Smarter Than Others: The Muhammad Ali Effect*, 7 SOC. COGNITION 275, 291 (1989).

75 *Id.* at 276. For further replication of this effect in the context of interpersonal relationship, see generally Paul Van Lange, *Being Better but Not Smarter Than Others: The Muhammad Ali Effect at Work in Interpersonal Situations*, 17 PERSONALITY & SOC. PSYCHOL. BULL. 689 (1991).

76 Allison, Messick & Goethals, *supra* note 74, at 277–78.

77 See generally Dale T. Miller, *The Norm of Self-Interest*, 54 AM. PSYCHOLOGIST 1053, 1053 (1999) (examining "the role the assumption of self-interest plays in its own confirmation").

78 See generally Catherine A. Sanderson & John M. Darley, "I Am Moral, But You Are Deterred": *Differential Attributions About Why People Obey the Law*, 32 J. APPLIED SOC. PSYCHOL. 375 (2002) (arguing that people attribute their own obedience to laws to internal factors like beliefs and morals, while they assume that external factors like fear of punishment motivate criminals). Elsewhere, I have demonstrated that engineers in Silicon Valley tend to overestimate the percentage of engineers who divulge trade secrets. See Yuval Feldman, *Experimental Approach to the Study of Normative Failures: Divulging of Trade Secrets by Silicon Valley Employees*, 2003 J.L. TECH. & POL'Y 105, 153–54; see also Dale T. Miller & Rebecca K. Ratner, *The Disparity Between the Actual and Assumed Power of Self-Interest*, 74 J. PERSONALITY & SOC. PSYCHOL. 53 (1998). The studies discussed in this Article examine the hypothesis that people overestimate the influence of self-interest on attitudes and behaviors. For example, participants overestimated the impact that financial rewards exerted on their peers' willingness to donate blood. In addition, the fact that participants overestimated the impact of self-interest on others was largely unrelated to the impact that it had on participants' own attitudes and behaviors. *Id.* at 54.

series of studies, Professor Miller has shown that much of the effect of self-interest on behavior is related to a widely shared cultural view that this is the way people ought to behave.⁷⁹ More specifically, in the context of legal compliance, Professor Sanderson and Darley, have developed the concept of “I am moral, but you are deterred,” which demonstrates how people differ in the view of what motivates others vs. self in the context of legal compliance.⁸⁰ Many psychological studies support the conclusion that people attribute too much undesirable behavior by others to fixed character traits in the actors and attribute too little to their behavior in a given social situation. Buckley, Harvey, and Beu suggest that this “fundamental attribution error” plays a role in overestimating the amount of wrongdoing by others.⁸¹ According to their study, most people are ethical with occasional lapses. Thoroughly unscrupulous people are an exceptional minority. The fundamental attribution error could cause a person who witnessed wrongdoing to conclude that the actor usually does wrong, whereas the correct conclusion in most cases is that the actor occasionally lapses.⁸²

Among the causes for this gap in perception of ethics is the media, providing one of the simplest explanations for overestimating wrongdoing.⁸³ Put simply, immoral events get more media coverage

79. Miller, *supra* note 77, at 1053; *see also* Daniel T. Gilbert & Patrick S. Malone, *The Correspondence Bias*, 117 PSYCHOL. BULL. 21, 21–22 (1995) (describing the development and the consequences of correspondence bias on behavior).

80. *See* Sanderson & Darley, *supra* note 78, at 375–76, 400–01.

81. *See* Jonathan R.B. Halbesleben, M. Ronald Buckley & Nicole D. Sauer, *The Role of Pluralistic Ignorance in Perceptions of Unethical Behavior: An Investigation of Attorneys' and Students' Perceptions of Ethical Behavior*, 14 ETHICS & BEHAV. 17, 18 (2004). The fundamental attribution error is the basis of the pluralistic ignorance phenomenon, implying that people may fail to account for others' true motivations in engaging in various behaviors. M. Ronald Buckley, Michael G. Harvey & Danielle S. Beu, *The Role of Pluralistic Ignorance in the Perception of Unethical Behavior*, 23 J. BUS. ETHICS 353, 354–55 (2000).

82. Buckley, Harvey & Beu, *supra* note 81, at 355–56. For an economic model that develops the effect of attribution biases, *see* Dhammika Dharmapala & Richard H. McAdams, *Words that Kill? An Economic Model of the Influence of Speech on Behavior (with Particular Reference to Hate Speech)*, 34 J. LEGAL STUD. 93, 119–20 (2005).

83. While psychological research on television violence tends to focus more on entertainment television, the daily news is even more heavily watched and also contains extreme and realistic violent content. *See* Dale T. Miller & Deborah A. Prentice, *The Construction of Social Norms and Standards*, in SOCIAL PSYCHOLOGY: HANDBOOK OF BASIC PRINCIPLES 799, 808 (Edward Tory Higgins & Arie W. Kruglanski eds., 1996) (discussing the role of the media in the phenomenon of the “spiral of silence”).

than moral ones. Lichtenberg and MacLean demonstrate that much of what the media reports is bad news.⁸⁴ In one study, Professor Johnson analyzed four different types of TV news programs (national network news, local news, independent news, and cable network news) for violence-type, conflict, and suffering.⁸⁵ Over one hundred programs were analyzed over a six-month period. The authors discovered an emphasis on news that was bad or violent.⁸⁶ The media also depicts immorality (including lying, adultery, robbery, and fraud) more than morality.⁸⁷ Furthermore, according to the theory of “automatic vigilance,” individuals who respond to undesirable social stimuli gain an evolutionary advantage.⁸⁸ As a result, undesirable stimuli attract more attention than desirable social stimuli,⁸⁹ especially when the source is undesirable behavior by others.⁹⁰

84. See Judith Lichtenberg & Douglas MacLean, *Is Good News No News?*, 17 GENEVA PAPERS ON RISK & INS. 362, 362 (1992); see also Gideon Koren & Naomi Klein, *Bias Against Negative Studies in Newspaper Reports of Medical Research*, 266 J. AM. MED. ASS'N 1824 (1991). Koren and Klein also show the extent of the media's coverage of bad news in their comparison of news coverage using two scientific studies, one focused on bad news and one on good news. The studies compared by Koren and Klein investigated the relationship between radiation exposure and cancer. *Id.* at 1824. The “bad news” study showed an increased risk of leukemia in white men working at the Oak Ridge National Laboratory. The “good news” study failed to show an increased risk of cancer in people residing near nuclear facilities. *Id.* at 1825. Koren and Klein found that subsequent newspaper coverage was far greater for the study showing increased risk of cancer in people residing near nuclear facilities. *Id.* at 1826.

85. See Roger N. Johnson, *Bad News Revisited: The Portrayal of Violence, Conflict, and Suffering on Television News*, 2 PEACE & CONFLICT: J. PEACE PSYCHOL. 201 (1996).

86. *Id.* at 207. Analyzing parameters of time allocation and amount of featured news stories, more than half (53.4 percent) of the news displayed violence, conflict, and suffering. Bad news was also given greater emphasis by being featured earlier in the programs. While local news broadcasted the most bad news, all four program types were found to emphasize bad news. *Id.*

87. For an example of media portrayal of immorality, see Del Jones, *Doing the WRONG Thing: 48% of Workers Admit to Unethical or Illegal Acts*, USA TODAY, Apr. 4, 1997, at 1A.

88. See Felicia Pratto & Oliver P. John, *Automatic Vigilance: The Attention-Grabbing Power of Negative Social Information*, 61 J. PERSONALITY & SOC. PSYCHOL. 380, 380 (1991).

89. There is a fundamental asymmetry in people's evaluations of gains and losses, of joy and pain, and of positive and negative events. A considerable body of research in fields as diverse as decision-making, impression formation, and emotional communication has shown that people exhibit loss aversion and assign relatively more value, importance, and weight to events that have negative, rather than positive, implications for them. See, e.g., Daniel Kahneman & Amos Tversky, *Choices, Values and Frames*, 39 AM. PSYCHOLOGIST 341, 342 (1984) [hereinafter Kahneman & Tversky, *Choices*]. In decisionmaking, potential costs are more influential than potential gains. See, e.g., Daniel Kahneman & Amos Tversky, *Prospect Theory: An Analysis of Decision Under Risk*, 47 ECONOMETRICA 263, 279 (1979) [hereinafter Kahneman & Tversky, *Prospect Theory*]. In impression formation, negative information is

Another possible source of this gap is more emotional than cognitive. A wrongdoer may protect his self-esteem by exaggerating how frequently others commit the same wrong.⁹¹ Relevant concepts invoked by psychologists include social validation, self-enhancing biases, and constructive social comparison.⁹² This last view, that the source of the bias is more likely to be related to bias in the perception of self rather than bias in the perception of others, is supported by the “holier than thou” argument.⁹³ Through an extensive review, this relatively recent paradigm recognizes that the bulk of studies have supported the view that people think that they are more moral than others. A commonly used demonstration of this gap is that a majority

weighted more heavily than positive information. See, e.g., Susan T. Fiske, *Attention and Weight in Person Perception: The Impact of Negative and Extreme Behavior*, 38 J. PERSONALITY & SOC. PSYCHOL. 889, 891 (1980); Norman H. Anderson, *Information Integration Theory: A Brief Survey*, in CONTEMPORARY DEVELOPMENTS IN MATHEMATICAL PSYCHOLOGY VOLUME II: MEASUREMENT, PSYCHOPHYSICS, AND NEURAL INFORMATION PROCESSING 236 (David H. Krantz et al. eds., 1974); David L. Hamilton & Mark P. Zanna, *Differential Weighting of Favorable and Unfavorable Attributes in Impressions of Personality*, 6 J. EXPERIMENTAL RES. IN PERSONALITY 204 (1972). In nonverbal communication, people are more responsive to negatively toned messages than to positive ones. See Ann M. Frodi, Michael E. Lamb, Lewis A. Leavitt & Wilberta L. Donovan, *Fathers' and Mothers' Responses to Infant Smiles and Cries*, 1 INFANT BEHAV. & DEV. 187, 192, 195–96 (1978).

90. See John J. Skowronski & Donal E. Carlston, *Negativity and Extremity Biases in Impression Formation: A Review of Explanations*, 105 PSYCHOL. BULL. 131 (1989). This concept is related to impression formation—the fact that unfavorable characteristics are weighted more heavily than favorable ones in initial formation of an assessment toward an object. See *id.* at 139. Results showed that likability ratings of a person associated with an unfavorable attribute were significantly more incongruous with a neutral impression than were ratings of a person associated with a desirable attribute. *Id.* at 131–32. Additionally, subjects were more confident in their likability ratings of the people with negative stimuli. *Id.* at 131. It is certainly plausible to equate unethical traits/information with negative traits/information when it comes to impression formation.

91. See, e.g., Wenzel, *supra* note 13, at 639 (arguing that in taxation compliance, people feel they underreport because they believe everyone else underreports).

92. See Jerry Suls & C. K. Wan, *In Search of the False-Uniqueness Phenomenon: Fear and Estimates of Social Consensus*, 52 J. PERSONALITY & SOC. PSYCHOL. 211 (1987) (positing that individuals have a motivational interpretation that enhances their need to justify and compare their level of fear to others); see also Ladd Wheeler, *Motivation as a Determinant of Upward Comparison*, 2 J. EXPERIMENTAL SOC. PSYCHOL. 27 (Supp. 1 1966) (examining the social comparison theory).

93. See Nicholas Epley & David Dunning, *Feeling “Holier Than Thou”: Are Self-Serving Assessments Produced by Errors in Self- or Social Prediction?*, 79 J. PERSONALITY & SOC. PSYCHOL. 861 (2000). Professors Epley and Dunning study the tendency of people to believe that they are more likely to engage in selfless and generous behavior than others (“holier than thou”). Epley and Dunning conclude that people overestimate in the prediction of their own behavior, while they are more accurate in predicting the behavior of others. *Id.* at 873.

of Americans believe they are in a highly “moral minority.”⁹⁴ Professors Epley and Dunning have taken this a step further and explored an important quandary with special relevance to this Article: Do people think that *others* are worse than they are in reality, or do people think *they themselves* are better than others in reality? What they have found is that people are very accurate with regard to others, but actually think that they themselves are more likely to engage in various ethical acts.⁹⁵ In our context, this means that in reality, if others behave ethically, people are not likely to ignore this fact.⁹⁶ According to their view (which should receive higher credibility for measuring actual behaviors of people), one can presumably expect no deteriorating effect on intrinsic motivation, as people only possess an overly positive view of themselves, and not a more negative perspective of others.⁹⁷

A more refined view, however, may question this assumption for a few reasons. First, the mere fact that there is a gap, even if people are accurate about others, might undermine people’s incentives to engage in socially desirable behavior, due to mechanisms such as the “sucker effect.”⁹⁸ Second, the causes for gaps between levels of ethicality do not completely undermine all mechanisms that were developed in this context, as the gap is only part of a more elaborate

94. See *id.* at 862; see also Nicholas Epley & David Dunning, *The Mixed Blessings of Self-Knowledge in Behavioral Prediction: Enhanced Discrimination but Exacerbated Bias*, 32 PERSONALITY & SOC. PSYCHOL. BULL. 641, 651 (2006) (finding that when predicting their own behavior, people rely on specific self-knowledge, ignoring any other information that may make their predictions more accurate).

95. See Epley & Dunning, *supra* note 93, at 861–62.

96. Epley and Dunning find many methodological problems in some of the studies cited above. *Id.* at 861–62. Therefore, their criticism is relevant to my own cited research on trade secrets and whistle-blowing.

97. But see Nicholas Epley, Eugene M. Caruso & Max H. Bazerman, *When Perspective Taking Increases Taking: Reactive Egoism in Social Interaction*, 91 J. PERSONALITY & SOC. PSYCHOL. 872, 886 (2006) (discussing the phenomenon that they term “Reactive Egoism,” in which individuals’ consideration of other people’s thoughts and perspectives leads them to engage in less socially diverse behavior).

98. The sucker effect is the phenomenon in which some individuals will reduce their individual effort when working on a group task because they fear becoming, or being seen as, a “sucker.” For a broader discussion, see generally Norbert L. Kerr, *Motivation Losses in Small Groups: A Social Dilemma Analysis*, 45 J. PERSONALITY & SOC. PSYCHOL. 819 (1983); Mel E. Schnake, *Equity in Effort: The “Sucker Effect” in Co-Acting Groups*, 17 J. MGMT. 41 (1991).

view of why certain aspects of people's behavior are more likely to be accessible.

In conclusion, the gap between self and others adds an additional behavioral complexity to the relationship between intrinsic and extrinsic motivations. Professor Pronin, who reviews the evolutionary, perceptual, developmental, and neurological reasons for this gap, concludes that “[w]hen people judge themselves based on their good intentions but others based on their less-good behavior (or based on cynical assumptions about human nature), they are likely to feel resentful and disappointed over others’ failure to meet them halfway.”⁹⁹

The gap between what one does and what others do and its effect on the intrinsic-extrinsic tension in human motivation were examined in two empirical studies I have conducted on employees in the United States.¹⁰⁰ In the first study, I examined Silicon Valley employees’ views of the behavior of others in the context of divulgence of trade secrets, given the limited enforcement of such behavior.¹⁰¹ The findings show that employees thought that others were significantly more likely than they themselves to engage in divulging trade secrets. Furthermore, when people were less familiar with the “others”, they were more likely to believe that others were pursuing their narrow self-interest (this was measured through a comparison of perceived proportion of employees who divulge trade secrets in one’s own firm and that of the perceived proportion of employees in Silicon Valley in general).¹⁰²

In a more recent joint paper with Orly Lobel that attempted to examine how to motivate whistle-blowers, we provided evidence of a similar phenomenon in the context of intrinsic motivation.¹⁰³ In that study, participants predicted that they would be more likely to report on their employer than would their non-workplace peers, and that their workplace peers would be more likely to report than most other people. In other words, individuals believe that “they themselves will

99. Emily Pronin, *How We See Ourselves and How We See Others*, 320 SCIENCE 1177, 1180 (2008).

100. See Feldman, *supra* note 78; Feldman & Lobel, *supra* note 7.

101. See Feldman, *supra* note 78, at 106.

102. *Id.* at 160.

103. See Feldman & Lobel, *supra* note 7, at 1190.

behave more ethically in the face of misconduct than others and that people with whom they are familiar will behave more ethically than the general population.¹⁰⁴ With regard to others, especially non-peers, respondents felt that high monetary rewards would serve as a much stronger motivator than a duty to report.¹⁰⁵ Even exercising caution as a result of the arguments by Epley, Caruso, and Bazerman, as discussed above, such findings suggest a challenge to the interplay between intrinsic and extrinsic motivation. If the frustration from the gap and biased social norms may shift peoples' behavior and reliance upon their own intrinsic motives, then accounting for the factors which determine this gap is desired.¹⁰⁶

Based on the three bodies of literature discussed so far, the third part of the Article will proceed to examine some more policy-relevant empirical studies. These studies explore the relationship between extrinsic and intrinsic motivation in various legal and policy-oriented contexts.

III. IMPLICATIONS FOR LEGAL POLICY MAKING

The complexity of the relationship between intrinsic and extrinsic motivation presented in this Article may cause the reader to feel that the government is left with no real options as to how to take advantage of behavioral knowledge in attempting to shape an individual's motivation rather than behavior. The criticism we raised with regard to current paradigms may create the impression of a "messy" literature, leaving the policy-maker without a clear route of action. In many ways, this review of the current literature suggests that the effect of law on intrinsic motivation is more complex than was commonly assumed. At the same time, our behavioral focus does suggest that motivation is an important factor in accounting for the efficacy of regulatory impact, as behaviors done out of intrinsic motives are superior by most accounts to those conducted under extrinsic ones.¹⁰⁷ To prevent that perspective, the following

104. *Id.*

105. *Id.* at 1198–99.

106. See Epley et al., *supra* note 97 (discussing "reactive egoism").

107. See, e.g., Deci & Ryan, *supra* note 1, at 233–34 (implying that intrinsic motivation is superior to extrinsic).

paragraphs will highlight some insights and refinements that will carry with them the potential for concrete policy recommendations. In particular, the suggested solutions will attempt to examine how the law may make use of the blurred distinction between intrinsic and extrinsic motivation, the multiple motivations approach to legal compliance, and the inability to have an accurate perception of oneself relative to promoting socially desirable behaviors.

Four constructs will be the focus of this part. First, we look at the ability of the policy-maker to frame legal incentives in a way to behaviorally tune the relevant theories, discussed above, regarding the dynamics of the relationship between intrinsic and extrinsic motivation. Second, we examine the possibility of tailoring the type of legal instrument to the level of intrinsic motivation of the typical individual in that context. Third, we examine whether legal intervention carries similar effects as monetary intervention. In this context, the focus will be on the factors that moderate whether legal intervention is always viewed as carrying a similar crowding-out effect as occurs with the usage of monetary instruments. Finally, we examine whether legal ambiguity can serve to countervail some of the disruptive effects of extrinsic considerations on the functioning of intrinsic motivations. In each of these contexts, findings that I accumulated through a series of joint studies will be used to illustrate the advantages of policy-making, which will be sensitive to the behavioral implications of the interplay between extrinsic vs. intrinsic motivations.

A. Framing of Legal Incentives

The first and most discussed series of steps in which the legal policy-maker can engage in this context is related to framing. Given the ability of the legal policy-maker to control the language used to describe legal incentives, there is great potential that can be gained from understanding framing when intrinsic motivation is taken into account. There seems to be a consensus among scholars who study the effect of legal incentives on behaviors that the framing of incentives may affect whether such incentives interact with the functioning of intrinsic motivation. Although traditional economic analysis would consider fines and pricing as equivalent if they entail

the same amount of payment, it has been shown that in reality, the way payments are framed matters significantly.¹⁰⁸ For example, Fehr and Gächter found that when monetary incentives were framed as a price reduction, they had a greater effect than when they were framed as a bonus.¹⁰⁹ Similarly, Frey and Stutzer have argued that both tradable emission rights and emission taxes could create a crowding-out effect, but the former has a strong crowding-out effect, while the latter's crowding-out effect is much smaller.¹¹⁰

In that regard, there is a growing body of research in both social psychology and behavioral economics that indicates that people respond better to incentives than to penalties.¹¹¹ From collaborative studies with which I have been involved, however, it seems that the advantage of awards over fines is not true in all contexts, and definitely not for all the dimensions that we may care about in legal compliance. Indeed, in a joint work with Oren Perez,¹¹² we observed that in an environmental context, when testing the usage of deposits vs. fines in encouraging recycling, there seemed to be a consistent advantage of deposits over fines,¹¹³ both in efficacy as well as in perceived social and legal desirability.

The ability to choose seems to be the main advantage of deposits over fines; however, this is context-dependent. In some circumstances, fines—which give the individual less choice—may seem more desirable in comparison to a reward, especially with regard to behaviors whose desirability is more controversial. Such findings can be found in a recent joint working paper conducted with

108. See Fehr & Gächter, *supra* note 52, at 30–31.

109. See *id.* at 31.

110. Frey & Stutzer, *supra* note 49.

111. For an example of social psychology explaining behavioral change with respect to the environment, see Raymond De Young, *Changing Behavior and Making It Stick: The Conceptualization and Management of Conservation Behavior*, 25 ENV'T & BEHAV. 485, 497–98 (1993) (arguing that while penalties create behavior change, they also bring negative effects, such as creative misbehavior).

112. See Yuval Feldman & Oren Perez, *Motivating Environmental Action in a Heterogeneous Regulatory Environment* (unpublished manuscript) (on file with author).

113. In the deposit system, consumers pay a deposit on each container they buy, which is returned to them when they return the container. $F(4,732)=8.15$, $p<.001$, $\eta^2=.04$. Obviously, deposits and awards are similar concepts and the relationship between them requires further discussion. *Id.* at 23.

Orly Lobel on how to incentivize whistle-blowers.¹¹⁴ In that context, those who reported under a regime of fines were seen as more socially desirable than those who did it under a regime of awards.¹¹⁵ Thus, the ability to choose was seen in this context as opportunistic, supposedly due to the general controversy of the loyalty issue at stake when one uncovers corruption in one's own organization.

Not only is the effect of framing of fines vs. awards/deposits context-dependent in some cases, but we can also see that framing has no effect even when individuals are fully aware of the different meanings of the various legal instruments. For example, in an earlier study conducted with Oren Perez, we examined the effect of choice of legal instrument on public willingness to engage in civic enforcement against pollution by factories.¹¹⁶ The findings showed that there was no difference between tax and fines in terms of their effect on reduction of moral outrage toward the pollution.¹¹⁷ Thus, framing is obviously important, but in some cases, the public will care more about the fact that money was paid rather than on the title given to a particular payment. This is especially interesting when considering the fact that from a formal legal perspective, there is a dramatic difference between those who pay fines due to violation of the law and those who pay taxes in accordance with the law. Thus, framing does not always prevail over the pure monetary effects of law, especially with regard to contexts where the law is not expected to affect compliance but rather enforcement of noncompliance by others. In that regard, the lack of effect of legal framing creates a challenge for measuring the magnitude of the expressive function of the law, which tends to view the meaning rather than the cost imposed by the law as its more important artifact.¹¹⁸

In summary, framing is naturally a promising policy route when intrinsic motivation is taken into account. Even when considering only three legal contexts, however, it can be seen that the ability to

114. Feldman & Lobel, *supra* note 7.

115. *Id.* at 1199–1200.

116. Yuval Feldman & Oren Perez, *How Law Changes the Environmental Mind: An Experimental Study of the Effect of Legal Norms on Moral Perceptions and Civic Enforcement*, 36 J.L. & Soc'y 501 (2009).

117. *Id.* at 526–27.

118. See Feldman & Lobel, *supra* note 7, at 1183–84.

generalize from one setting to another is limited, and context-sensitive empirical research is needed.

*B. Differentiated Regulation and Individual Differences:
Heterogeneity in Intrinsic Motivations*

The second aspect I will examine with regard to intrinsic vs. extrinsic motivations is related to individual differences in the level of intrinsic motivation toward a certain act. It seems that the differences in the effect of monetary incentives on different individuals could theoretically be expected both with regard to magnitude as well as with regard to the framing of the monetary incentives.

Following the “W effect” described by Gneezy¹¹⁹ with regard to magnitude, there is room to expect that with varying levels of intrinsic motivations among individuals, various sums of money will have a different effect on each subgroup. Indeed, in a paper with Perez, we have demonstrated a full interaction of the effect of high and low fines on an individual’s willingness to engage in recycling.¹²⁰ The findings demonstrate that those who place a higher emphasis on environmental commitment are more likely to recycle when fines are lower. For those who place a lower emphasis on environmental commitment, the effect is reversed and higher fines have a stronger effect.¹²¹ Thus, not only do we find evidence for the W effect (differences between small and intermediate payoffs), we also see that it changes according to the level of intrinsic commitment by participants.

Other than the magnitude of the monetary incentive, its framing may also be accepted differently according to one’s level of intrinsic motivation. Those who are intrinsically motivated may view reward in a different way than those with lower intrinsic motivation. In that context, Lobel and I demonstrated that those who were intrinsically

119 Uri Gneezy, *The W Effects of Incentives* (Oct. 13, 2003), <http://cramton.umd.edu/workshop/papers/gneezy-w-effect-of-incentives.pdf>. In this case, intrinsic motivation was measured on a scale of environmental commitment as well as sensitivity to the distance from one’s home to a recycling bin.

120. *See* Feldman & Perez, *supra* note 116, at 4.

121. *Id.* at 27.

motivated were not significantly affected by framing, while those who were low on intrinsic motivation were affected by some types of extrinsic motivation.¹²² Perez and I developed a somewhat different finding regarding the differences in perception of incentives by those with high and low motivation, demonstrating that those who were low on intrinsic motivation were more likely to prefer deposits to fines, while the opposite was true for those who were high on intrinsic motivation.¹²³

These findings, which suggest that the level of intrinsic motivation does indeed significantly moderate the effect of extrinsic motivation, raise the following questions: What should the policy-maker do with these insights? Who should be targeted—those who are internally committed or those who are not?¹²⁴ A few approaches can be examined to deal with this puzzle. One approach may suggest that we need to focus only on those individuals lacking an internal commitment, given that, as shown in this Article, those are the individuals who tend to be more sensitive to variation in the framing of extrinsic motivation. Thus, in terms of efficacy, it is clear that focusing more on those who are lower on their intrinsic level may carry greater behavioral change. Furthermore, with regard to those with limited intrinsic motivation, there is a lesser need to account for the crowding-out effect, given that those individuals are not intrinsically motivated to begin with. Nevertheless, a more comprehensive perspective on this issue may suggest that the main factor to consider is context, and more specifically, the proportion of people whose desirable behavior is sought.

122. See Feldman & Lobel, *supra* note 7, at 1191.

123. *Id.*

124. While preparing the revised version of this draft, I came across a working paper by some of the leading regulation scholars (Gunningham and Sinclair) who similarly suggest that “those who are differently motivated are likely to respond very differently to a deterrence strategy. While it may be effective when applied to the recalcitrant and perhaps to reluctant compliers it will be counter-productive as regards OHS leaders . . . and irrelevant to the incompetent.” Neil Gunningham & Darren Sinclair, *Multiple OHS Inspection Tools: Balancing Deterrence and Compliance in the Mining Sector* 6 (Nat’l Research Ctr. for OHS Regulation, Working Paper No. 55, 2007). Nevertheless, they treat this challenge as too complex from a legal policy-making perspective: “But inspectors are for the most part, incapable of knowing the motivation of those they are regulating, with the result that a ‘pure’ deterrence strategy may achieve very mixed results.” *Id.*

There seems to be a basic typology of three situations. The first type is where only a certain portion of the population is needed, as in the context of whistle-blowing. There is no need for every employee in an organization to be motivated to disclose wrongdoing. Trying to interest everyone to divulge a fraud may be unnecessary, while the cost of targeting everyone may have an inadvertent effect on the intrinsic motivation of those we primarily care about. Furthermore, in such a context, we are also interested in why people do what they do, not only that they actually do it. In some of the other behaviors, such as recycling, however, it is less important to know whether people recycle due to intrinsic or extrinsic reasons. In contrast, in the context of whistle-blowing, we see a dramatic difference between those who blow the whistle for extrinsic reasons and those who only report types of behaviors expected to be less harmful to the individual personally, without regard to the level of harm to the organization.¹²⁵ To counter this, it may actually be an advantage to have only a few employees come forward with such allegations.

An example for the second type is trade secrets, where everyone needs to be motivated, as the few people who will not be affected by the legal instrument may make it futile to keep company knowledge proprietary. In that context, we have to focus on the lowest common denominator, meaning that those with the lowest level of intrinsic motivation to be loyal to the company should be the focus of the regulation.

Finally, an example for the third type is recycling. In that context, we want as many people as possible to recycle. In this case, it does not matter whether some people with no intrinsic motivation choose not to recycle, as that would not jeopardize the motivation of others who choose to recycle. In that case, we may want to motivate both populations, with no specific preference as to those without intrinsic motivation, because as long as plastic bottles are put into the designated recycling containers, the quality of recycling (in contrast to quality of whistle-blowing) is less likely to be affected by the level of passion associated with the act.

125. See Yuval Feldman & Orly Lobel, *Decentralized Enforcement in Organizations: An Experimental Approach*, 2 REG. & GOVERNANCE 165, 180 (2008) (discussing employees' preference to go after small fish vs. big fish).

Clearly this taxonomy is far from being comprehensive. One could suggest that the level of intrinsic motivation is important if one is interested in knowing, for example, the distance people would be willing to go to recycle; the level of intrinsic motivation may also be important in related environmental activities where the cost of monitoring is prohibitive. It seems that taking into account the differences between legal contexts, while not solving the differences in people's motivations, we are nevertheless able to apply this knowledge to a behaviorally informed regulation rather than to revert to the lowest denominator (deterrence in all legal contexts).

C. Law vs. Money

The next quandary to be explored in the policy sphere is whether the effect of legal intervention on intrinsic motivations is similar to its effect on monetary rewards. The answer to this question could expand the ability of the policy-maker to better use the arsenal at his or her disposal regarding the type of motivations used by people. Indeed, in an analysis of crowding-out theories, extrinsic motivations can be seen to include a range of intervention types, even deadlines, and are definitely not limited to a focus on just monetary rewards.¹²⁶ In that regard, one prediction from the crowding-out literature may be that converting a social practice into a legal requirement may inevitably lead to a decrease in the level of intrinsically-related motivations. As we have seen, the crowding-out effect is more complex than one would assume, so the question arises: In which contexts would enacting a law be viewed as having a similar effect as imposing a monetary incentive? Or to frame the question differently, does imposing a law always carry a similar effect as the provision of money with regard to non-instrumental activities? In that context, Frey and Stutzer claim that external regulation such as “command and controls” is expected to have an effect similar to a monetary reward.¹²⁷ Examining the same context from a perspective of various commodification processes, Dagan discusses whether the effects of

126. See Deci, Koestner & Ryan, *supra* note 2, at 627.

127. Frey & Stutzer, *supra* note 49, at 406.

monetary rewards are unique or whether other factors, including regulation, could have a similar effect.¹²⁸

Furthermore, is legal intervention always disruptive when dealing with pro-social behaviors in general and love in particular? The reason why this question may carry more than one answer is related to some of the expressive law theories that were reviewed prior to the crowding-out literature in the first part of the Article. According to this approach, legal compliance can have multiple motivations and law can change behavior due to various mechanisms. Some of these mechanisms are not driven by extrinsic motivations but rather boost one's intrinsic motivation. The law may enhance the functioning of voluntary social practices, rather than undermine them. The endowment effect supports this view that the law could improve the way individuals perceive a practice.¹²⁹

D. Entitlement and Endowment Effect

In one of the most influential papers in the field of behavioral economics,¹³⁰ Kahneman, Knetsch, and Thaler have suggested that prospect theory¹³¹ leads to an endowment effect¹³² in which giving up things that one owns is especially distressing.¹³³ This theory suggests that rights legally owned are especially valuable psychologically. People should not only be less willing to give up a right once they feel it is theirs, they should also be more likely to appreciate it.¹³⁴ In other words, enacting a law is likely to make a social practice more

128. Tsilly Dagan, *Commodification Without Money* (Bar-Ilan Univ. Pub. Law & Legal Theory, Working Paper No. 03-10, 2010).

129. Jeffrey J. Rachlinski & Forest Jourden, *Remedies and the Psychology of Ownership*, 51 VAND. L. REV. 1541, 1551 (1998).

130. See Daniel Kahneman, Jack L. Knetsch & Richard H. Thaler, *Experimental Tests of the Endowment Effect and the Coase Theorem*, 98 J. POL. ECON. 1325 (1990).

131. See Kahneman & Tversky, *Prospect Theory*, *supra* note 89.

132. See generally Christine Jolls, *Behavioral Law and Economics* (Nat'l Bureau of Econ. Research, Working Paper No. 12879, 2007), available at <http://www.nber.org/papers/w12879.pdf> (describing the endowment effect in the fields of behavioral law and economics).

133. Kahneman, Knetsch & Thaler, *supra* note 130, at 1326–28. For a critique of the experiments that were shown to create the endowment effect, see Charles R. Plott & Kathryn Zeiler, *Exchange Asymmetries Incorrectly Interpreted as Evidence of Endowment Effect Theory and Prospect Theory?*, 97 AM. ECON. REV. 1449 *passim* (2007).

134. See Rachlinski & Jourden, *supra* note 129, at 1551; Cass R. Sunstein & Richard H. Thaler, *Libertarian Paternalism Is Not an Oxymoron*, 70 U. CHI. L. REV. 1159, 1181 (2003).

psychologically important and beneficial for those who are entitled to receive it under the law.

Thus, the crowding-out theory may suggest that legal intervention undermines a social practice, while the expressive law and endowment effect theories suggest that legal intervention may improve the functioning of social practices. Based on these two conflicting views of the possible effect of legal interventions, in a joint work with Tom Tyler, we examined a phenomenon that was highly associated with intrinsic motivation—the effect of the law on perceived fairness in an organization.¹³⁵ We explored whether the influence of “pay and promotion” procedures on employee adherence to workplace rules differed depending upon whether those voice procedures were enacted within companies voluntarily or because they were mandated by law. This question was addressed using both a survey of employees and employee reactions to an experimental vignette.¹³⁶ The results indicate that the influence of evaluations of the procedural justice of performance appraisal hearings on judgments of overall workplace fairness, perceptions of management legitimacy, and employee rule-abiding behavior is greater when employees believe their company’s workplace procedures are mandated by law. Two features of procedures—their prevalence, and whether they were expected—led employees to believe they were mandated and, consequently, enhanced their influence.¹³⁷ Thus, at least in the context of organizational justice, the findings suggest that extrinsic intervention may influence the formation of a social practice into a legal one, and this is likely to enhance overall levels of rule-abidance among employees.

A possible implication of these findings, and one of the main quandaries of this Article, is that one cannot make predictions with regard to the crowding-out effect of law without taking into account the expressive law literature. Combining these two bodies of literature suggests that there is a gap between legality and monetary

135. Yuval Feldman & Tom R. Tyler, *Mandated Justice: The Potential Promise and Possible Pitfalls of Mandating Procedural Justice in the Workplace* (3d Annual Conference on Empirical Legal Studies Papers, 2008), available at <http://ssrn.com/abstract=1133521>.

136. *Id.* at 8.

137. *Id.* at 26.

incentives, in the context of the dynamics between intrinsic and extrinsic motivations. While money may undermine the functioning of intrinsic processes as a justice motivation, law could actually enhance it.

E. The Potential Contribution of Legal Uncertainty

The last policy implication I would like to explore is related to the use of uncertainty as a way to reduce the effects of extrinsic motivation. In a joint work with Shachar Lifshitz, we focused on the contribution of legal uncertainty and the ability of an individual to act in a way that would represent his or her genuine preferences, moral perception, and true economic interests.¹³⁸ We developed a theoretical taxonomy that outlines areas of law where uncertainty is most needed.¹³⁹ We argued that in those cases, regulation that would clearly and systematically provide legal and economic benefits and penalties may lead people to neglect their true preference and behave in a manipulative-strategic way.¹⁴⁰ Our theoretical discussion explored the merits of creating a *partial* veil of ignorance to the *ex post* consequences of the law. We argued that “such a veil may promote values such as autonomy, efficiency, distributive justice, and personal well-being. Furthermore, such a veil of ignorance may enable people to act in a natural and non-strategic way, namely, in a way not driven by legal incentives.”¹⁴¹

Such ignorance of the law seems to be at odds with the main purpose of legal regimes like criminal and torts law which aim to direct people’s behavior. Our argument seems to run into a logical paradox: If following the law may create more harm than good, should such a law be abandoned altogether? If the law is just and efficient why should we hide it? Recognizing these challenges, we developed an innovative taxonomy of three prototypes of legal areas where masking the legal consequences of an act, *ex ante*, would benefit both individuals and society. To demonstrate the advantages

138. Yuval Feldman & Shachar Lifshitz, Behind the Veil of Legal Uncertainty (unpublished manuscript) (on file with author).

139. *Id.* at 2–4.

140. *Id.*

141. *Id.* at 2.

of legal uncertainty, we conducted an experimental survey, where we compared participants' decision making with regard to employing salaried workers vs. contractors under a condition of legally related monetary advantages. The monetary incentives were provided under conditions of uncertainty, ambiguity, and certainty.¹⁴² In accordance with the hypothesis, “[w]e found that for the measure of *self-decision*, the scenarios of *No External Reward* and *Probabilistic Reward* generated a significantly higher preference for the salaried employee than did the *Certain Reward* (all p’s < .05).”¹⁴³ We found, however, that for the measure of “what most others would do,” the result was somewhat different. “[T]he *No External Reward* scenario generated a significantly higher preference for occupying a salaried employee than did the scenarios of *Ambiguous Reward*, *Probabilistic Reward*, and *Certain Reward* (all p’s < .05).”¹⁴⁴

Thus, the empirical testing demonstrates that certain legal benefits have stronger effects on people’s decisions, but also that both probabilistic and ambiguous legal benefits are not stronger than the “no legal benefit” conditions. While the reduction in the effect of ambiguous legal benefits was expected according to the behavioral literature, no such effect was expected for the probabilistic legal benefits. This effect could possibly be explained by the uniqueness of the legal uncertainty, which was shown before to behave differently than typical ambiguous information.¹⁴⁵ Therefore, these findings could potentially be seen as supporting the argument that by creating a veil between the legal consequences of an act and the *ex ante* legal decision making, we may give one’s intrinsic consideration an opportunity to function without the disruptive effects of the extrinsic rewards associated with the *ex post* legal status of the act.

IV. SUMMARY AND CONCLUSION

We have seen that people are influenced by a multitude of motivations, through various routes and dynamics. Even within the

142. *Id.* at 15.

143. *Id.* at 17.

144. *Id.*

145. This effect is discussed in more detail in the discussion section. *See supra* Part II; *see also* Feldman & Teichman, *supra* note 13, at 1009–10.

bodies of literature that we have reviewed—the expressive law on one hand and the crowding-out on the other—the direction of the influence of extrinsic motivation on intrinsic is far from being clear and is sometimes contradictory. The complexity of the prediction is exacerbated when taking into account the gap between what people believe motivates them vs. what they believe motivates others.

Based on these three bodies of literature and the numerous moderators that would affect their predictions, we have suggested a few policy-oriented approaches. First, focus on framing by asking how we define the legal reward and how defining the legal payments by calling them fines, taxes, deposits, or rewards is shown to have meaningful influences in various contexts. In addition, adding verbal rewards and various expressive law components to impose a duty could supplement the use of framing in balancing intrinsic and extrinsic motivations. Second, targeted regulation, with sensitivity to the heterogeneity in levels of intrinsic motivation, could be used to treat different people with different types of rewards. We have seen some findings that demonstrate the differences in the effect of incentives on individuals with high and low levels of intrinsic motivations. Finally, it was shown that strategic ambiguity of the law could undermine some of the disruptive effects of the law, in areas where maintaining the dominance of intrinsic motivation is most important.

Nevertheless, what we view as the main point, both theoretically and practically, is the fact that there is no one-size-fits-all solution as to how policy-makers should think about the intrinsic vs. extrinsic dynamic. It is hard to predict the accumulated effect of these mechanisms without taking into account the notion of context, and the predictions will always be limited. It seems that the main theoretical effort should be focused on creating some multiple dimension taxonomy of contexts, where the dynamics of intrinsic-extrinsic motivations could be revisited.

A few tentative thoughts about such taxonomies were inserted as part of the discussion throughout this Article, but some of the main concepts deserve special attention. Thus far, we have presented data with regard to three main types of activities: recycling, whistle-blowing, and divulgence of trade secrets. These three examples will be used to help us think about the importance of being aware of legal

contexts when the policy-maker attempts to decide how to incentivize behaviors without harming individuals' intrinsic motivations.

A. What is the Nature of the Behavior?

We have discussed the importance of taking into account the behavior the policy-maker wishes to promote. The quality of the behavior dimension makes the intrinsic motivation a more important factor. In that regard, one cannot excel in recycling or even in organ donation.¹⁴⁶ In some legal contexts, we care only about one's activity level and willingness to pay. In others, the quality of the behavior is more important. As in whistle-blowing or even blood donation, it is less desirable to think about employees who do it purely for extrinsic reasons. Furthermore, in legal contexts, where "extra-role" activity is desired, the cost of harming intrinsic motivation increases and one should be more cautious in introducing extrinsic motives.

*B. From What Proportion of the Target Population Do We Need Cooperation?*¹⁴⁷

Another dimension with high importance is consideration of how much cooperation of the target population we need when the level of intrinsic motivation is heterogeneous. Here, we can use the three contexts suggested above. In the context of trade secrets, we need the cooperation of 100 percent of the target population, from those with the highest level of intrinsic motivation to those with the lowest level of intrinsic motivation. Therefore, the price of harming the intrinsic motivation of committed employees may be secondary to making sure that even those without intrinsic motivation will be loyal to their employers. The context of whistle-blowing is the exact opposite, where we only need the cooperation of some of the employees which will go forward when some illegal activity occurs within the organization. So we mainly care about those who are high on intrinsic motivation with the policy-makers focused on that population. For

146. But this is not the case with regard to blood donation.

147. See Roland Bénabou & Jean Tirole, *Incentives and Prosocial Behavior*, 96 AMER. ECON. REV. 1652, 1654 (2006).

various reasons, we may not even want to incentivize those without intrinsic motivation.¹⁴⁸ Finally, in the context of recycling, we are interested in averaging, or creating a situation where as many people as possible will recycle. In such a situation, we have no preference for either high or low intrinsically-motivated individuals and, therefore, the balancing consideration made by the policy-maker is whether or not to use extrinsic motivation and through which types of incentives.

C. How Important Is It that You Think that Others Are Being Motivated by Intrinsic Motivations?

We have discussed at great length the fact that people are biased in their perceptions of what others are doing and for which reasons. It is clear, however, that the effect of why people do what they do is different depending on the context, based on the nature of the relationship, the level of reciprocity, the importance of others' motivation to one's evaluation of its authenticity, and more. Presumably, the closer the behavior is to areas where one would expect identity-related factors to be dominant, the greater the damage is to the other from viewing one's motivation as being extrinsically motivated. In more commercial contexts, it is less likely that we would see extrinsic motivation as harming the authenticity in others' behavior.

D. How Measurable is the Behavior?

Finally, a relatively straightforward aspect one might want to consider is the visibility of the behavior and the ability to measure both its quantity and quality (recycling in houses vs. loyalty to employer in keeping proprietary information secret). It is safe to assume that with more visible and measureable behavior, the policy-maker should care less about harming intrinsic motivation, the main advantage of which is its limited dependency on external measurement. Thinking about these context dimensions could lead

¹⁴⁸ For example, if we provide a monetary incentive for whistle-blowing, we may fear false reports by bounty hunters.

the policy-maker to focus efforts on protecting intrinsic motivation in the most suitable contexts.