# Towards A General Theory For Understanding (Non)Compliance Behaviours

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## Summary

It is commonplace for regulators to apply a cost-benefit assessment of the likelihood of (non)compliance when they are introducing new regulations. However, empirical studies have shown that generally people are much more likely to comply than a calculation of their benefits and costs might imply. Early behavioural studies into peoples' (non)compliance initially took a dualistic approach assuming that people would either fully agree or disagree with implementing regulations. This has been shown to be too simplistic to address the complexities involved in understanding peoples' actual behaviour when they are responding to new regulations.

In this paper a Social-Cognitive Model (SCM) is proposed for providing an understanding of peoples' compliance behaviour and predicting their likely responses to regulatory interventions affecting their lives. The SCM's strength is that it integrates three existing theories describing peoples' policy motivation, social contract alignment, and personal dissonance. In the model, compliance behaviours are encouraged when the regulations appeal to intrinsic motivations, when people have a trusted relationship with the regulator, and when people want to support the intent of the regulation. In contrast, noncompliance behaviours are more likely when the regulation appeals to extrinsic motivations, when in peoples' experience the regulator appears to be unfair, and when the regulation is perceived to be a threat to the majority of peoples' existing behaviours. The type and level of enforcement then can be matched to the factors that can encourage compliance and reduce noncompliance.

**Key Words:** social cognitive model, environment, policy

## Utility Models

A number of compliance and noncompliance studies have examined the personal utility of regulatory options as the main determinants for understanding and predicting how people will respond to them (beginning with Becker, 1968). Policies for the taxation of both private citizens and companies, have been particularly important to central governments and early models of the utility of compliance were applied to taxation (Allingham & Sando, 1972). The use of utility models imply that citizens will comply with regulations when their perceptions of the benefits from doing so outweigh the perceived costs of noncompliance. Addressing the issues of compliance arising from the use of utility models requires providing monetary (or other) incentives to encourage cooperative behaviours, and increasing fines (or other material disincentives) to discourage noncooperative behaviours. Utility models with some modification are still being used in some jurisdictions (e.g. Buechel et al., 2018). Utility models have been applied to the adoption of environmental practices by Pannell (2003), van Reenen (2012), and Renwick (2019). These studies describe people making fully informed rational choices between alternative activities based on their apparent benefits and costs, although sometimes calculating these can be quite difficult (Scholz, 2003). Although utility models have assisted regulators by providing them with an understanding of motivations for simple behaviours, utility models of compliance behaviours and the resulting economic deterrence models for noncompliant behaviours, have unfortunately not generally

been able to predict the likelihood of compliance or the risks of noncompliance with any confidence for regulatory development (OECD, 2000).

## Dualistic Models

Building on the economic models, initial behavioural studies into (non)compliance have examined the propensity of citizens towards enacting compliant or noncompliant behaviours. Initially these studies took a dualistic approach to the subject – citizens could be compliant or they might be noncompliant but they couldn't be both at the same time (Hamilton, 2012). Dualistic approaches support regulatory design that focusses on monitoring behaviour within the target group, enforcement of desired practices, and sanctions that are intended to encourage obedience to the rules (Tyler, 2006, OECD, 2000). The initial papers supported the development of more tools for enforcement, but they provided little insight into understanding why and how noncompliance occurs in the first place.

As researchers began examining the motives for (non)compliance, a number of factors have emerged. Compliance has been related to peoples' sense of duty, institutional trust, and feelings of citizenship and so noncompliance has been associated with the absence of these factors (May, 2005). There has also been a growing understanding that the level of compliance may reflect the operating context of citizens. Bewsell and Kaine (2005) found that farmer use of environmental practices was highly related to their farming context and the practicality (or not) of implementing them within their farming systems. Botha et al. (2006) found that available technologies could be limiting farmer application of good environmental practices. Other research has described how peoples' social context influences their likely compliance with tax laws (Blumenthal et al., 2001). Some of these researchers have utilised the literature of Rogers (2003) describing noncompliant people as 'laggards' (Gunningham & Sinclair 2002). Understanding and predicting compliant behaviours is made easier when the desired behaviours are described quite specifically in the policies and rules themselves (Ajzen & Gilbert-Cote, 2008). In these cases a range of models are available from sociology and social psychology to aid policy makers with understanding and predicting the desired behaviour (Parminter, 2019). However, these models are less useful for understanding and predicting noncompliant behaviours because of the range of behaviours involved; from those behaviours that may result from well-intentioned but ill-judged decision making, to those that might actually be considered subversive (Étienne, 2010).

## Enforcing Responsive Regulations

Applications of the utility model for understanding compliance and the deterrence model of enforcement have been shown to under-estimate the level of voluntary compliance amongst citizens (Scholz, 2003). Determining *ex ante* the level of enforcement required can be quite difficult. In situations where peoples' apparent noncompliant behaviour is heavily influenced by their operating context and their social situation, it is easy for a singular approach to enforcement to appear unfair resulting in greater resistance. Indeed an overly punitive model of enforcement has been shown to actually encourage resistance and exacerbate the potential for noncompliance (Kagan & Scholz, 1984). The appropriate approach according to Ayres and Braithwaite (1992; Murphy, 2004) is to apply responsive regulation matching the level of enforcement to the degree of cooperation shown by citizens. Ayres and Braithwaite created a pyramid of enforcement with most of the regulatory effort being used for persuading voluntary compliance with the law and only if this proves to be ineffective would more punitive sanctions be introduced. They contend that to be effective, the pyramid has to be known by the public, in advance and the steps in the pyramid adhered to by the enforcement agency. In their application of responsive regulation the Australian Taxation Office assumes that three situational constraints may lead to noncompliance (Murphy, 2004). These are that:

people may not know how to comply with the regulations in which case they need to be provided with that information; people may not want to comply and so should be involved, encouraged and if necessary enforced; and people may not be able to comply and should be enabled and empowered (Hamilton, 2012). In this model the motives for noncompliance remain simplistic and peoples' lack of obedience attributed to singular motives operating in isolation (Étienne, 2010).

# General Behavioural Model For (Non)Compliance

A number of authors find that peoples' tendency towards compliant or noncompliant behaviours can be quite complex and difficult to predict (for examples Feld and Frey, 2007; Paternoster & Simpson, 1996). Étienne (2010) could find in the literature no formalised way of understanding the noncompliant behaviours of individuals within a target population when their multiplicity of actions occur simultaneously and are associated with a multiplicity of motivations. However, building on Étienne's review, a possible explanatory Social-Cognitive Model (SCM) is displayed in Figure 1. In the model, compliance behaviours are encouraged when the regulations appeal to intrinsic motivations, when they have a trusted relationship with the regulator, and when people want to support the intent of the regulation. In contrast, noncompliance behaviours are more likely when the regulation appeals to extrinsic motivations, when in their experience the regulator appears to be unfair, and when the regulation is perceived to be a threat to the majority of peoples' existing behaviours.

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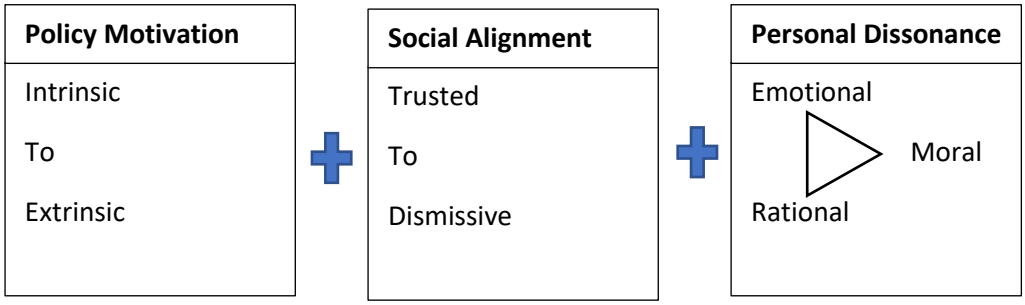
**Figure 1.** A Social-Cognitive Model of (non)compliance resulting from policy motivation, social alignment and personal dissonance

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## Policy Motivation

This part of the SCM utilises the 'motivation crowding theory' of Frey (described in Feld & Frey, 2007). According to the theory, people can have extrinsic or intrinsic motivations to comply with regulations, and often they have a mix of both of them.

Extrinsic motivations to comply with regulations are when there are sufficient rewards and/or punishments put in place to make compliance the best rational option for people to choose. Extrinsic motivations are associated with prescribing activities rather than focussing on outcomes. Interventions that are externally motivated tend to be standardised for all citizens without modification for more or less compliance. They generally require the regulator to observe people in the target community to detect obedient behaviours and they often include significant threats of punishment for noncompliance (Feld & Frey, 2007).

Intrinsic motivations exist when people consider that being obedient is rewarding enough in itself, and they have an internalised norm encouraging compliant behaviour. Intrinsic

motivations are generally high if the regulator and the target group have a constructive working relationship and the regulations are being developed cooperatively (Feld & Frey, 2007).

The nature of the regulatory interventions can strengthen or weaken peoples' intrinsic motivations to comply. When people initially have a strong intrinsic motivation to comply the introduction of a regulation with extrinsic compliance mechanisms substitutes for and can dominate, their intrinsic motivation. This could be the effect of paying for compliance or adding financial penalties for noncompliance. External motivations may be sufficient to actually increase noncompliance amongst the target group if the extrinsic motivations have a relatively large influence but are still insufficient to completely substitute for the intrinsic motivations that have been replaced.

Rather than introducing external motivations, peoples' intrinsic motivation to comply with new regulations can be stimulated and enhanced, such as through promoting peoples' sense of civic responsibility and their sense of duty to their community (Étienne, 2010).

## Social Contract Alignment

People tend to behave as if there is an underlying social contract between themselves and the government (Scholz, 2003). It may include an uneven power relationship, but when governments appear credible and other citizens are also obedient, people will try and meet their state-defined obligations. People build their confidence in government institutions from previous encounters with officials, government agencies or similar institutions and the level of reciprocity that they experienced during those encounters. Peoples' previous personal encounters with government and regulator officials is extremely effective at generating highly salient attitudes and beliefs that are very formative in guiding peoples' subsequent behaviour towards government agencies (Scholz, 2003). Different life experiences result in different expectations about future relationships and with that comes different levels of trust and willingness to comply with government regulations.

People know that they will not benefit from every new regulation (distributive fairness), and so people rely upon the regulatory process having been open, transparent and accessible to them (procedural fairness) in order to decide how willing they are to be compliant with regulations that may disadvantage them in some way (Scholz, 2003). Procedural fairness is able to mitigate some of the inevitable disappointments from anticipating distributive fairness. The values underlying these assessments provide the basis of peoples' formation of an implicit contractual obligation to cooperate with regulatory institutions. When distributive and procedural fairness are lacking, people no longer trust the regulator.

The critical function of enforcement of regulations is to assure people that other citizens will meet their 'contractual' obligations. This means that being obedient is the correct thing to do. The government's deterrence capability is more important at guaranteeing the behaviour of others than acting as a deterrent for individuals themselves. However, if people feel that those powers may be used against them to compel them to do things that are not in their best interests, the application of a regulator's coercive powers can disrupt their feelings of obligation to the government (Scholz, 2003). Too little enforcement will not provide people with enough assurance about the behaviour of others, whereas too much enforcement (picking up accidental and inadvertent noncompliance) adversely affects peoples' perceptions of procedural fairness, and undermines an initial social contract of obligation with the regulator (Scholz 2003).

## Personal Dissonance

When people are concerned about the changes that they might be required to make as a result of the introduction of a new regulation they can suffer from personal cognitive dissonance. The greater the gap between the expected behaviours and their own beliefs, attitudes, and preferences, the greater the amount of stress that this can cause (Harmon-Jones & Mills, 2019). Despite their feelings of dissonance, when a regulator is trusted and people have confidence in the general purpose for a required behaviour they may still try to comply with the regulations. However, when they don't, they can become uncooperative (Hurley, 2020).

People responding to pressure to make changes as a result of regulations can adopt one of four coping sensibilities, spread in two dimensions, separately, or in combination (Braithwaite et al., 2007):

- They may have feelings of being oppressed, leading them towards becoming less cooperative or resisting the new regulations.
- By thinking morally, they may decide to accept the regulations, rationalise acceptance of their strictures and become cooperative with the regulator.
- They may try to undermine the regulations, seeking ways of regaining personal control and asserting individual independence from the regulatory authority in order to reduce the impact of its strictures. They may indulge in game playing, doing just enough to avoid enforcement, whilst minimising the costs of fully complying.
- They may be committed to the overall purpose of the regulations and so want to better understand the regulator's expectations, and try to make changes to achieve the desired outcomes.

When the majority of people in a community (70-80%) consider that a new regulation incorporates behaviours that are already common place within their community and that it has been procedurally fair they are likely to accept the regulation and support its implementation (Parminter, 2016; Thomas et al., 2016; Benkler, 2011; Yan et al., 2015). They are also likely to support enforcement for encouraging compliance amongst recalcitrant people around them (Parminter et al., 2006).

# Discussion and Conclusions

The purpose of this paper was to review a selection of the available literature on compliance behaviour and use them to build a generalisable theory for understanding and predicting levels of compliance and noncompliance. The paper began by discussing the limitations of taking a benefit-cost approach to assessing the utility of new regulations and then using the calculated net gain or loss as the basis for predicting peoples' likely responses. The main limitation was that on its own, this approach underestimates the actual levels of compliance that are being achieved in practice. Early studies had a dualistic perspective for describing compliance. This was a tendency to assume that people were either fully committed to implementing a regulation or that they fully rejected it. These approaches have been found in empirical studies to be too simplistic and unable to account for the diversity of responses that people have actually been making.

By utilising more recent approaches in the published literature, a Social-Cognitive Model (SCM) was developed in this paper. The model can be used to provide insights into peoples' motivation to comply or not comply with regulations. It integrates three existing theories as a practical way for regulators during policy design, relationship building and policy implementation, to consider the key elements influencing compliance behaviour. The SCM

can be generalised across policy interventions and compliments more detailed studies into the behaviours associated with specific policies (Parminter, 2009). The model fits well with models for the enforcement of regulations such as the Responsive Regulation Model (Ayres and Braithwaite, 1995) and Smart Regulation (Gunningham and Sinclair, 2002).

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