

# Deterrence Theory Revisited

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## Abstract

Influencing discretionary driver behaviours in Australia relies very much on the coercive strategy of deterrence. This paper stems from a thorough review of deterrence theory and risk taking carried out in 2002-03 for the Land Transport Safety Authority, New Zealand (Elliott, 2003).

The paper begins by exploring the definition of deterrence leading to the proposition that if motorists do not refrain from offending out of fear of consequences they are by definition not deterred.

It explores the various roles deterrence plays in influencing behaviour including its moral educative role.

It argues that 'general' and 'specific' deterrence are not different mechanisms, but the same mechanism applied to different populations.

The targets for 'general' deterrence are not the general population of motorists. It is limited to the marginal group of offenders or prospective offenders who can be influenced through fear, ie are likely to offend and likely to be deterred by the threat of punishment.

## 1. INTRODUCTION

Professor Nigel Walker (1980) Director of the UK Institute of Criminology, argued that 'limiting principles' exist indicating when the criminal law should or should not be used, eg.

- **It is better to prevent than punish;**
- The law should **not** be used to **penalise behaviour that does no harm;**
- The law should **not** be used to **compel people to act in their own best interests.;** etc.

Deterrence is founded on the first mentioned principle. However, deterrence is never the sole or primary goal of the law (legal system).

## 2. DEFINING DETERRENCE

Deterrence involves the threat of punishment via some form of sanction. Deterrence is a way of achieving control through fear. **If motorists do not refrain from offending out of fear of consequences they are, by definition, not deterred.**

Deterrence, in general, is the control of behaviour that is effected *because* the potential offender does not consider the behaviour worth risking for fear of its consequences.

Beyleveld (1979) defines the essence of deterrence by two criteria:

*"(15) Given X's negative attitude towards the imagined experience of undergoing what he believed were the actual penalties he risked if he committed C<sub>1</sub>, his positive motivation to commit C<sub>1</sub>, and the chance he believed existed of having what he believed were the risked penalties being inflicted upon him if he committed (or attempted to commit) C<sub>1</sub>, and the chance he believed existed of successfully fulfilling his motivation to commit C<sub>1</sub>, X "decided" that the personal utility of not committing C<sub>1</sub> exceeded the personal utility of committing (or attempting to commit) C<sub>1</sub>.*

*(16) This 'calculation' of utility was the reason why X did not commit C<sub>1</sub>. (Whatever other factors may have weighed towards X not committing C<sub>1</sub>, this calculation was necessary for X not to have committed C<sub>1</sub>, and the calculation*

*alone or in conjunction with other factors was sufficient for X not to have committed C<sub>1</sub>.” (p.209)*

A “deterrent effect” of sanctions is the preventive effect of the sanction(s) resulting from the fear that the sanction(s) will be implemented. Thus “deterrence” refers to any process by which the threatened act is not committed (or is at least hindered) because of the deterrent sanction.

Strictly defined “A person is deterred from offending by a sanction if, *and only if*, he refrains from that act *because* he fears the implementation of the sanctions, *and, for no other reason.*” (Beyleveld 1979,p.207)

Deterrence is therefore but one compliance-gaining mechanism.

### 3. HOW DOES DETERRENCE OPERATE?

The mere presence or introduction of a sanction may hinder or prevent an offence in a number of different ways:

- (i) Knowledge of the sanction affects perception of the cost of offending so that compliance is seen as more attractive than offending;
- (ii) Knowledge of the sanction, coupled with a belief in the sanctity of law or unquestioning legal authority, may be sufficient for compliance;
- (iii) Sanctions may also have moral-educative and habituating effects so that they may be causally involved in the generation of moral beliefs and inhibitions, and laws may be obeyed purely by force of habit;
- (iv) The implementation of sanctions, rather than the mere threat may, reduce offences by incapacitating potential offenders, reforming them or by creating via stigmatisation of the offender, informal pressures to comply.

Deterrence refers to some combinations of these different mechanisms but for strict usage **(i) above must always be present** or else the compliance gaining strategy is something other than deterrence. This statement refers to the notion that people weigh up the costs and benefits in deciding not to offend and the cost is the penalties that are threatened.

The philosophy underpinning deterrence is that the risk to the law breaker must be made so great and the punishment so severe, that people believe they have more to lose than to gain from the offence.

**Deterrence** in the literature, and in practice, is usually only in reference to a **legal sanction** but non-legal sanctions such as fear of ostracism or the disapproval of others are also capable of acting as deterrents as will be explored later in this Review.

### 4. THREE DIFFERENT EFFECTS

Deterrence as a preventive measure has three different sorts of effects:

- (1) The deterrent effect -*intimidation*;
- (2) The strengthening of moral inhibitions -*education*; and
- (3) The stimulation of habitual law abiding conduct-*reinforcement*.

Sometimes a distinction is made between primary or direct deterrence (the intimidating effects of punishment (general and specific) and secondary or indirect deterrence. The latter refers to the ability of formal sanctions to stimulate, reinforce and mobilise informal social disapproval and to their role in anchoring and buttressing the normative climate of the community. Salem & Bowers (1970) argue that the indirect or secondary role of deterrence is much more substantial than the direct intimidating effects.

Deterrence is thought to be less effective in controlling or eliminating habitual, unthinking behaviour. Much of driving behaviour is habitual. Fattah (1976) questions the real role of deterrence suggesting that its primary or direct effect may hide its real effects.

*“One would wonder whether the main function of legal sanctions with regard to drivers’ behaviour is intimidation (curbing or modifying the behaviour through the fear of punishment) or education (by instilling habitual modes of performance in compliance with the traffic standards and regulations)(p.48, emphases added).*

## 5. MISUSE OF THE TERM DETERRENCE

Usually in the literature ‘deterrence’ is used to mean “attempts” to deter and the measures used are called deterrents but should be termed “intended” deterrents.

There is a tendency, especially in the road safety literature, to refer to mechanisms that encourage compliance as being deterrents. For example the Scottish Office Central Research Unit paper *The Deterrent Effect of Enforcement in Road Safety* refers to:

*“Deterrence mechanisms and include (1) the driving test, (2) road safety awareness campaigns, (3) warning signs on roads and (4) explicit mechanisms which deter drivers from offending by threat of punishment (speed cameras, traffic patrols).”*

This writer has argued (in section A6) that (1), (2) and (3) are compliance gaining techniques and are independent of a deterrence based strategy.

Deterrence ought to be more correctly used to refer to techniques that specifically set out to gain compliance by the threat of punishment. Thus, in the reference in the above mentioned paper:

*“Other measures with potential for deterring drivers from offending included....”*

the “other measures” are aimed at gaining voluntary compliance but not via the threat of punishment. Even a dictionary definition usually includes fear in its definition of deter:

*“To discourage or restrain (one) from acting or proceeding through fear, doubt, ie.: to frighten”.*

When people are dissuaded from some kinds of behaviour, by being informed that they are illegal, or prohibited by rules whose legitimacy they acknowledge, it is not deterrence. It is compliance. Any attempt to use education to eliminate misbehaviour or offending, unless it relies on fear of consequences is not deterrence.

**At the heart of deterrence is the threat of punishment.** Thus barbed wire and fierce dogs are intended as deterrents provided that their presence is deliberately made obvious. Burglar proof locks are not.

## 6. DETERRENCE BEYOND FEAR

Deterrence, in ordinary language usage, carries the meaning of influencing by fear. But Deterrence does not motivate solely by fear. There is a general acceptance that the threat and imposition of the punishment can have a motivating influence apart from the creation of fear, through an expression of social condemnation of the forbidden act.

Thus the law is not only a price tariff it is also an expression of society’s disapproval of a particular act and this disapproval may work in subtle ways to influence behaviour. These effects can be described as: the moral influence or the educative, the socialising, the attitude

shaping, the norm strengthening or reinforcing influence. **In essence, deterrence has both a fear component and a moral (educative) component.**

Researching the moral effect of deterrence is not easy because it requires a long-term perspective. Indeed, the legislation of one generation may become the morality of the next. If a substantial part of the impact of a law is believed to be in its power to support and reinforce social norms, one would not expect rapid changes in offence rates unless there were drastic changes in penalties and law enforcement.

Deterrence is concerned with severity and certainty of sanction. However, if deterrence has a moral effect then another dimension of deterrence is the perceived legitimacy of the laws or regulations. To expect a moral influence, the law and the machinery for enforcement of it must be looked upon as wielding legitimate authority. Examples of laws lacking authority might include euthanasia, marijuana and even low level speeding when detected by electronic devices!

Another almost never discussed aspect of deterrence is its habitulative effects. Much of law-abiding conduct is habitual and the threat of punishment plays a role in this habit formation. The responses of drivers towards traffic signals or to restraint usage are out-standing examples. For a habit to be established there must first be compliance based upon other sources, which may be fear or respect for the law; the habit is eventually formed through repetition of the law-abiding conduct.

Thus deterrence theory accepts that legal threats can also change behaviour by teaching right and wrong, building habits, building respect for the law, and rationalising conformity.

## **7. UNDETERRED COMPLIANCE**

**Conformity due to moral scruples is not deterrence.** A lot of motorists most of the time conform (do not offend) for reasons other than deterrence, ie. 'undeterred compliance' and this covers compliance due to moral scruples or knowledge one's own limitations or other reasons having nothing to do with fear. (Incidentally, conformity through fear of hell is deterrence, not morality.)

*Impulsive behaviour* can be described as *undeterred non-compliance* and impulsive acts would appear not to be influenced by deterrents.

*Compulsive behaviour* is also unlikely to be deterred and can be classified as *undeterred non-compliance*. Here the offender is usually aware of the presence of fear but is overcome by other feelings. Thus the risks and consequences are insufficient to deter compulsive behaviour. It is possible that compulsive behaviour can be delayed or transferred to another place through fear of consequences.

Beyond impulsive and compulsive behaviour, there are other forms of *undeterred non-compliance* including being unrealistically optimistic about offending; realistic risk-taking (part of the job), penalty of no real inconvenience.

A final category of *undeterred non-compliance* are those who commit an offence as a protest even though the penalty is almost certain and unpleasant. This category could be called '*defiant non-compliance*'.

Thus people are most open to being deterred by threat of punishment when they are not behaving morally, impulsively, compulsively, defiantly, despairing or optimistically.

## 8. “GENERAL” VERSUS “SPECIFIC” DETERRENCE

‘*General deterrence*’ signifies the effects of threat of punishment and that threat encompasses both the risk of detection and the severity of the sanction. ‘*Special*’ or ‘*specific*’ deterrence signifies the effects of actual punishment on the individual offender.

Both “specific” and “general” deterrence attempt to do the same thing. **The difference is *general* relies on imagination and *specific* on memory.**

Theoretically *general deterrence* relies entirely on the threat of punishment and not on actual punishment. From a *general deterrence* perspective actual punishment has the role of making the threat credible. If the threat were 100 per cent effective there would be no place for punishment.

Andrenaes (1975) suggests that *general deterrence* should not be defined as the restraining impact that the punishment has (on others) because such a definition misses the true meaning of general deterrence, namely the threat of punishment.

The ***general deterrent effect*** of a sanction is the deterrent effect that a sanction has on a **potential offender who has not personally had the sanction inflicted on them before.**

The ***special (specific, individual) deterrent effect*** of a sanction is the deterrent effect which a sanction has on a **special offender who has personally had the sanction inflicted on the before.**

***General* and *specific* deterrence are not different mechanisms, but the same mechanism applied to different populations.**

*General deterrence* assumes the general motoring public (at least ‘potential’ offenders) will learn from the experience of punished offenders and will refrain from following their example. Logically *specific deterrence* should be stronger than *general deterrence* since the actual experience must be more powerful than the theoretical knowledge of sanctions or vicarious punishment. The relatively high rate of repeat offenders, however, challenges this assumption.

*Specific deterrence* is based on the assumption that people will learn from their own experience. Thus offenders, when punished, will learn from the bad experience of punishment and this will deter them from further offences.

Deterrence assumes that the motoring public knows which actions are prohibited by law and have an idea about the penalties attached to the offences. A specific or accurate knowledge is not required. What is required for deterrence is an awareness of what behaviour is not legal, a belief in the probability of detection and a belief that the sanction is aversive.

‘*Specific*’ deterrence refers to the extent to which offenders who have **been caught** and processed by the system are **dissuaded from committing the same offence** or similar offences **by the experience of the punishment.**

‘*General*’ deterrence refers to the extent to which **potential** offenders and actual offenders who **have not yet been caught** are **dissuaded by the threat of punishment.**

## 9. CONDITIONS FAVOURING DETERRENCE

Deterrence is thought to be more effective:

- in controlling rational behaviour than in inhibiting impulsive behaviour;

- when motivation to engage in the prohibited behaviour is low and less effective when the motivation is high (as in compulsive behaviour);
- when the behaviour is not habitual and requires thought processes and is intentional. To the extent behaviour is already habitual deterrence is least effective.
- in assisting in the development of habitual modes of behaviour.
- in controlling intentional behaviour (violations) rather than in eliminating negligent behaviour (eg, errors).

## 10. INDIVIDUAL CHARACTERISTICS IMPACTING ON INTENDED DETERRENTS

Deterrence is likely to impact on individuals to varying degrees depending on; age, sex, ethnicity/race, education, social class, personality, degree of commitment to the moral norms of society versus conflicting norms of sub cultures, attitudes toward life and towards risks, degree of acceptance of authority, degree of isolation or alienation from social system, past experience, etc.

Some of these characteristics can be classified as follows:

<b><i>More likely to be deterred</i></b>	<b><i>Less likely to be deterred</i></b>
Pessimists	Optimists
Future-oriented	Present-oriented
Risk avoider	Risk-taker
Reflective	Impulsive
High self monitor	Low self monitor

Young people, in particular, exhibit some or all of the characteristics in the right hand column as do many males.

## 11. TARGET GROUPS FOR DETERRENCE

For *specific deterrence*, the target are those who have **already offended** and thus been subject to punishment.

For *general deterrence*, the target is the **general population of motorists** since one key effect of general deterrence is to influence norms and the socialisation process.

However, with respect to the *threat of punishment* the targets for *general deterrence* are **“would-be offenders” or “prospective offenders”**. The target however really is somewhat narrower: it is **only those who can be influenced through fear, i.e. are likely to offend and likely to be deterred by the threat of punishment**.

Thus two groups stand out as not being targets for deterrence:

(1) Those motorists for whom deterrence is not necessary and who are unconsciously deterred by the mere fact of the law’s disapproval and who fear disgrace of being caught more than they fear the punishment; and

(2) The un-eterable who cannot be deterred by the threat or by the experience of punishment.

Zimring & Hawkins (1968), cited in Fattah (1976), argue that deterrence is aimed mostly at the **“marginal group”** who lie between the law abiding citizens for who deterrence is not necessary and the undeterrable citizens for who deterrence is ineffective.

**The “marginal group” represent the class of persons “next most likely” to offend. It is this marginal group who determine whether or not a particular punishment will serve as an effective deterrent.** In the case of motoring offences, this group is likely to be very sizeable, perhaps a slight majority of drivers, and this would appear to be especially true for the subgroup of young male drivers.

This analysis clearly shows, as (Fattah, 1976) asserts that **deterrence is always limited to a smaller group than the population (of motorists) at large**. Thus changes in punishment can only affect the members of this group and not the law-abiding or the recidivists and therefore not the population in total.

## 12. LIMITS OF DETERRENCE

Some social scientists have argued that **deterrence is a myth**. However, there is ample evidence that attaching unpleasant consequences to behaviour will reduce the tendency for many people to engage in that behaviour.

The failure of capital punishment as an effective deterrent to murder does not mean that no punishment can have any deterrent effect. An example in which punishment fails as a deterrent does not nullify the theory and does not mean that others are not deterred by the threat of punishment.

The failure of punishment as a *specific deterrent* does not mean that punishment is necessarily ineffective as a *general deterrent*.

With respect to crime, deterrence is irrelevant to the bulk of the population because the socialisation process keeps most people from committing any offences, not the police, nor the risk of punishment. However, most offences relating to motorists are not perceived as criminal acts and thus socialisation plays less of a role. In New South Wales publicity is being used by the Roads & Traffic Authority to convince motorists and the public (juries, judiciary) that “drink driving is a crime”. However, it has yet to claim drink drivers are “criminals”.

Deterrence is least likely to be effective where punishment (including detection and conviction) can be avoided. Its effectiveness is limited also if the punishment is uncertain.

Even if punishment can't be avoided and is certain, deterrence may be limited because:

- a) punishment can be seen as a *professional risk* for those who habitually offend;
- b) punishment may be seen as a *lottery*. This is likely for low level motoring offences such as habitual speeding. Most drivers who speed at low levels do so for decades without detection or punishment.
- c) punishment, or its threat, can cause people to *avoid detection* rather than not offending and this is applicable especially for frequent or habitual drink drivers.
- d) punishment, no matter how severe or certain, may be *too weak* to counter the motivation to offend as in the case of compulsive behaviour.
- e) punishment fails to take into account the *level of unpleasantness* of the consequence from one person to another. This applies especially to monetary sanctions that are hardly likely to deter the financially well off.
- f) the *subjective* judgement as to the likelihood of detection and/or severity of punishment is *much lower than the objective probability or severity*. It is the subjective judgements which determine how an individual responds to the threat of consequences. Unfortunately, and especially young male drivers, are characterised by an *optimism bias* regarding their low likelihood of an accident, their driving ability and their likelihood of detection if offending.

### Characteristics of a “Successful” *General Deterrence Program*

A large number of variables in practice are likely to impinge on the efficacy of the deterrent effect of punishment. These effects will vary according to:

- the nature of the offence,
- public attitudes regarding the seriousness of the offence,

- the degree of social cohesion (since the foundation of deterrence is group intimidation),
- the degree of urbanisation,
- the nature and magnitude of the prescribed penalty,
- the applicability and credibility of the threat (certainty and celerity of apprehension and punishment),
- knowledge and perceptions of sanctions and risks, and
- differences among potential offenders (e.g. age, sex, education, intelligence, social class etc).

Three components in particular influence the deterrent effect of punishment: severity, swiftness and certainty. The three are interactive complementing each other.

### **Severity of punishment**

In general, the public, including legislators, believe that the severity of a punishment is relevant to its degree of deterrence in some sort of mathematical equation. Thus if penalties work in one situation they will work in all; if some people are deterred by threats then all will be; if doubling the penalty works then trebling it will work even better. However, the law of diminishing returns applies so that there is a critical point in which increasing punishment has no effect on the rate of offending. Some researchers argue that it can even increase offending rates because detection may go down because the penalties are believed to be too harsh.

Publicity regarding offences can enhance the severity of punishment as can demerit points. At the criminal level, the experience of punishment can actually work in favour of future offending since the risk of stigmatisation is eliminated once the first penalty has been applied. There is less fear of a second conviction because his reputation is already tarnished and he knows what to expect.

### **Certainty of punishment**

Criminologists, in general, argue that the effectiveness of a deterrent is derived less from its severity than from its certainty. Most studies show that greater certainty of punishment is associated with lower offence rates and therefore it is better to improve law enforcement than increase penalties. Publicity can enhance the certainty, especially indicating that people are being caught and punished. If punishment is a deterrent then a wide use of it would be more effective than scarce or sporadic use. Frequency of punishment is invariably related to levels of detection.

### **Swiftness (Celerity) of punishment**

The basis of the evidence for swiftness is essentially the mechanism of conditioning. Thus, if the actual application of the threat is to be associated in the minds of potential offenders with the offence then such infliction of punishment has to be prompt and take place immediately or a short time after the offence has been committed. The mechanism involves conditioning so that stimulus and response are closely and invariably related. The trouble is most offenders are not punished every time they offend.

David South, a psychologist who specialised in alcohol and traffic safety, and recently retired from VicRoads enunciated the characteristic of successful general deterrence. These principles were stated in a reply to an earlier "Position paper on Punishment" which was published in the Australian Psychologist (Sanson et al., 1996).

*"1. it is only possible to deter behaviour that is the result of a deliberate decision, made in a reasonably rational state. It is not possible to deter people from making errors of judgement, and difficult to deter acts that are committed in anger, or acts committed when drunk. To put these propositions in a practical form, we would not expect general deterrence*

*to prevent murder, road accidents resulting from a failure to give way, or assault involving drunks.*

- 2. It is most effective if the behaviour to be prescribed is described precisely, so that potential offenders know exactly what they must not do. We cannot effectively deter careless driving, following too closely, or driving a vehicle that makes "excessive" noise.*
- 3. Potential offenders must perceive the possibility of detection to be high. It should be noted that it is the potential offender's perception that is important, and the actual probability of detection is only one of the factors that influences the perceived probability of detection. A good deal is known about other factors that influence it. Some of these are the nature of the enforcement method used (e.g. Jeffs & Saunders 1983; Moloney, 1994), and the way mass media publicity is used (Elliott, 1993).*
- 4. The penalty applied must be sufficiently severe to be taken seriously by the target group. If, however, the penalty is more severe than is considered to be a "fair thing" in terms of retribution, then various mechanisms will come into play to defeat the deterrence process (e.g. Misner et al., 1976; Smith, 1977). Far from there being a linear relationship between penalty severity and amount of deterrence, there is generally a small range of penalty severity that will be effective. Penalties that are too lenient will not be effective at all. Penalties that are too severe will not be applied, and – provided this fact becomes known – will also be ineffective.*
- 5. The process of detection must be such that potential offenders believe they will be detected, no matter how careful or clever they are. For example, when drink drivers could only be charged if they were judged to be "impaired" by the police, most drivers could convince themselves that they could "hold their liquor" and would not be detected as obviously impaired. The introduction of offences based on limits to blood alcohol concentration, with measuring instruments available to all police, allows publicity to point out to people that if they drive with a blood alcohol concentration exceeding the legal limit, and they are stopped by the police, they will be detected, whether or not they believe their driving is obviously impaired.*
- 6. The penalty that will be awarded must be known, and seen as unavoidable. This suggests the use of "infringement notices" or, where courts are involved, mandatory minimum penalties, and restrictions on the options the courts have to fit the penalty to the crime and to the offender. Mandatory minimum penalties and restrictions on the options of the court conflict with the features of a system designed to give priority to considerations of retribution, or justice. When the proponents of mandatory minimum penalties go too far, for example by imposing a minimum of 14 days in gaol for a first offence of stealing a can of beer in the Northern Territory, there is a strong reaction from the legal system." (South, 1998, p.77).*

## **Enhancing Deterrence**

On the spot traffic infringement notices make no allowance for what the Court might consider such as personal culpability or individualised sanction. There is a flat rate penalty system. However, if infringement penalties are to act as a deterrent to re-offending then consideration should be given to finding a means for **increasing the penalty for second and also subsequent offences.**

Infringement notices should not be seen as the major form of social control. Rather, education should be the primary tool of social control so that road users increase their knowledge and awareness regarding the reasons for the sanctions and the social consequences of not complying. Ideally, the aim is to combine fear of punishment with the guilt associated with the social non-acceptability of the offence. One mechanism for enhancing the effects of deterrence is publicity regarding the increased likelihood of detection and the seriousness of penalties, but the latter needs to raise the moral issue, i.e. potential harm to others.

Another mechanism involves the temporal contiguity of offence and punishment. The more proximate the punishment on the offence the greater the deterrent effect. Thus electronic devices (red light and speed cameras) suffer in terms of deterrence because there is no apprehension, no warning, just remote detection and remote fine. The deterrent effect is less than would occur when pulled over by a traffic police and either ticketed or warned. Roadside sanctions (mandatory licence suspension and vehicle impoundment) offer immediate punishment. What electronic devices, like speed cameras offer, however, is an increase in the certainty of detection and this ought to be more deterring than swiftness of punishment. The deterrent effect of technical devices is increased if there is some immediate feedback that the detection device has been triggered or some warning a short distance down the road.

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## Acknowledgment

The writer would like to thank Land Transport Safety Authority, New Zealand for the contract of preparing the "Background for LTSA Review of Administrative Penalties in New Zealand; An Analysis of Deterrence and Risk" available on the LTSA web site as a pdf file ,232 pages.