

MORAL FOUNDATIONS THEORY AND ATTITUDES TOWARDS THE PUNISHMENT  
AND CRIMINALISATION OF DRUG OFFENDERS

BY

CAMPBELL FARGHER

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### **Abstract**

Research on punitive attitudes has generally found some level of consensus on the relative seriousness of different offence types. However, how to approach the issue of drug offending is often a heavily debated issue, with some portions of society supporting harsh punishments for drug offenders, and others arguing for no sanctions at all. The current study, using both a student and general population sample, aimed to identify the underlying moral reasons behind these attitudes. Participants completed the Moral Foundations Questionnaire, a scale measuring the factors that influence a person's moral judgment, as well as numerous other scales that measured their punishment responses towards a variety of drug, harm, and 'taboo' sexual offences and practices. The endorsement of binding moral foundations, those relating to group-based moral concerns, was found to be a predictor of increased overall levels of punitiveness, while the endorsement of the foundation of purity was found to predict punitive attitudes towards drug offences and 'taboo' sexual practices, but not harm offences. Additionally, there were significant links between participants' levels of moral outrage, their preference for punishment, and their support for the criminalisation of the various offences. The results of this study suggest that punishment responses towards both drug offences and 'taboo' sexual practices rely on a similar moral reasoning process, one that relies on perceptions of impurity to inform the wrongfulness of an offence.

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## Introduction

There is now a substantial body of literature devoted to understanding cross-cultural, historical, and individual variations in punitiveness (Doble, 2013; Robinson & Kurzban, 2006; Santana, Applegate, Fisher, Pealer & Cullen, 2013; Sellin & Wolfgang, 1964; Vidmar, 2002). However, relatively little attention has been paid to variation in the *kinds* of acts that are subject to punishment by the state and how punitiveness often varies depending on the offence type. This is an important topic, because there is substantial variation in the kinds of offences that are criminalised both historically and cross-culturally. Drug use and possession, for instance, is criminalised to vastly different levels across different contexts. For example, in Singapore, the possession of a certain quantity of any illicit substance (e.g., 30g of cocaine or 500g of cannabis) carries with it the risk of the death penalty (Edwards et al., 2009), while in Portugal, drug possession has essentially been decriminalised, with users facing no risk of imprisonment for personal use (Jelsma, 2009). New Zealand, meanwhile, takes a moderately punitive approach to drug offending, with the use and supply of most psychoactive substances facing some form of penalty, from a \$500 fine for cannabis possession to life imprisonment for cocaine supply (Misuse of Drugs Act, 1975).

As well as variations in how crime is punished by the state, there is also substantial individual variation in the kinds of offences that individuals think should be subject to punishment. This is especially the case for so-called ‘moral offences’ with no tangible victim(s) such as blasphemy, certain kinds of sexual behaviour, and – arguably – the use and sale of psychoactive drugs. One promising theoretical framework for understanding individual variation in the kinds of acts that are believed to be worthy of punishment and how those acts should be punished is Moral Foundations Theory (Haidt, 2002; Haidt & Joseph, 2004). According to Moral Foundations Theory, variation in individuals’ moral reasoning is due, in part, to differences in which moral domains the individual has attached the most importance to



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during their reasoning process. While much of the research into moral foundations has focused on their influence in guiding political beliefs, there is some evidence that suggests it may also play a role in our judgments of criminal behaviour (Silver, 2017; Silver & Silver, 2017).

The primary aim of this research, therefore, is to explore the relationship between the endorsement of different moral foundations and attitudes towards the punishment and criminalisation of drug offences, relative to other types of crime.

### **Understanding Punishment Responses**

Understanding the reasons why and how we choose to punish criminal offenders has been a heavily researched area of criminology. Research into public rationales for punishing offenders has revealed multiple sentencing goals, from deterring potential offenders to incapacitating at-risk offenders, subsequently protecting the community from the risk of harm (Doble, 2013; Santana, Applegate, Fisher, Pealer & Cullen, 2013). Other common rationales include rehabilitation, censure, a public display of a disapproval towards both the individual and the act, and retribution (Doble, 2013; Santana, Applegate, Fisher, Pealer & Cullen, 2013). Yet while these reasons may apply to a significant proportion of the criminals that make up our prison population, public attitudes towards particular types of crimes are much more complex. Many recreational drug users, for example, do not necessarily pose a serious risk to the community, and arguably do not require rehabilitation, yet historically public support for the criminalisation of drug use and possession has been high (Millhorn et al., 2009; Paulin, Searle & Knaggs, 2003). Thus, in order to fully understand public attitudes towards criminal offenders, and why they can differ between offence types, it is important to first understand the reasons why some non-violent, non-threatening acts are seen as wrong and worthy of punishment by society.

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Some research suggests that support for the punishment of criminal offenders is directly related to our inherent emotional response (Vidmar, 2002). When certain acts are perceived to threaten societal norms or values, individuals feel emotional outrage, and are therefore more likely to support the punishment of the culprit (Vidmar, 2002). While these emotional judgments occur on an individual level, research has suggested that there is a shared ‘intuition of justice’ in society, in that there is a consensus on which acts are worthy of punishment, and which acts are not (Robinson & Kurzban, 2006). A range of studies in this area have shown that people are consistently able to categorise offences into levels of crime seriousness and can easily rank and compare crimes in order of seriousness (Sellin & Wolfgang, 1964). Additionally, slight changes in detail in the description of an offence can lead to drastically different judgments. For example, Robinson and Darley (1995) presented participants with a series of crime vignettes in which slight details were altered, and asked them to state their deserved level of punishment. These alterations included the intent of the action, the directness of the offence, and the age of the offender, among others. In all eighteen scenarios, participants were able to identify and evaluate how worthy of punishment each act was, with small factual changes leading to entirely different judgments of crime seriousness. These tests show that individuals have the ability to make nuanced, yet complex, intuitions of justice across a wide range of scenarios.

Not only are people able to make these nuanced judgments of crime seriousness, but a review of the literature by Robinson and Kurzban (2006) has shown that, in almost all cases, these judgments are shared by an overwhelming majority of the population. For example, in the aforementioned study by Robinson and Darley (1995), while individuals differed in their harshness of assigned punishment, there was a general agreement on the relative placement of offences on the so-called ‘punishment continuum’ (Robinson & Kurzban, 2006, p. 1855). Similarly, a variety of crime seriousness consensus studies have all found low levels of

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variation in relative evaluations of deserved punishment (Blumstein & Cohen, 1979; Hamilton & Rytina, 1980; Sellin & Wolfgang, 1964). No significant demographic differences in crime seriousness were found in these studies, suggesting some level of agreement among different groups of individuals in society.

Although these findings have been widely replicated, many of these studies have focused on offences with defined harms such as violent and sexual offending, with little consideration made of ‘moral’ offences with no obvious individual or collective victim(s). Therefore, Robinson and Kurzban (2006) conducted four studies assessing the applicability of collective intuitions on both tangible and intangible offences. Across two samples, participants were asked to rank 24 tangible offences (e.g., stabbing, robbery, and abduction) and 12 intangible offences (e.g. drug use and supply, prostitution, and bestiality) in order of how deserving of punishment the offenders were. In both samples, there was an overwhelming level of agreement in the order of deserved punishment for tangible harm offences, with only 2% of rankings deviating from the norm. In contrast, both samples’ assessments of intangible offending varied greatly, indicating a far lower level of agreement on how deserving of punishment ‘moral’ offenders are. Robinson and Kurzban (2006) attribute this difference to systematic differences in how the offences are perceived. While tangible offences that involve the infliction of harm are clearly encapsulated under the banner of ‘wrongdoing, the intangible offences are far more open to interpretation, as the blameworthiness of the offender is often hard to discern without any clear or obvious victim. Despite these differences, Robinson and Kurzban’s (2006) analyses do demonstrate the human tendency to want to punish. While there was no definite agreement on the relative seriousness of moral offences, across all studies there was a clear, shared intuition to punish individuals who deviate from society and break societal norms and values, regardless of the victim-type. This innate response to norm-breaking behaviour is referred to in the literature as ‘moral outrage’, and is often said to be accompanied

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by feelings of anger, disgust, and fear, depending on the offence type (Bastian, Denson & Haslam, 2013).

This lack of consensus regarding the seriousness of moral offences in comparison to harmful offending may be at least partially attributed to differences in what considerations are driving attitudes towards different types of crime. Crime seriousness, it is suggested, is a function of either the harmfulness of the offence, the perceived wrongfulness of the offence, or a combination of both (Warr, 1989). While harmfulness reflects a factual judgment on the amount of harm being inflicted on the victim, perceptions of wrongfulness rely on a normative judgment of the offence, and whether or not it is seen to violate personal and cultural norms and values. Findings from Warr (1989) suggest that the primary consideration made when determining the seriousness of the offence varies greatly depending on the type of offence. For example, crimes against the person, such as homicide, rely on considerations of both harmfulness and wrongfulness to inform punitiveness, while attitudes towards property offences reflect feelings of wrongfulness more so than harmfulness. However, much of the other literature suggests that it is harmfulness, not wrongfulness, that dominates perceptions of crime seriousness, except in the case of victimless crime, in which moral wrongfulness is believed to have more relevancy (Adriaennsen et al., 2018; Stylianou, 2003). Regardless of which domain dominates, research consistently suggests that people's perceptions of crime seriousness are deeply rooted in individual considerations of moral wrongfulness and/or harmfulness (Adriaennsen et al., 2018; Duff, 2014). Importantly, while there is a general agreement in assessments of harmfulness, resulting in the consensus that offences involving the infliction of harm deserve punishment, crimes without a tangible victim rely on appraisals of wrongfulness, leading to divergent opinions on the seriousness of these offences (Robinson & Kurzban, 2006).

**Drug Offences.** The primary area of concern in the current study is how intuitive moral concerns may or may not relate to opinions about drug offenders. Generally, research into attitudes towards drug offenders has revealed that responses differ based on drug type and offence type, with some substances and actions perceived as more deserving of punitive sanction than others. For example, one study assessing how supportive of punishment the public was towards different kinds of drug offender revealed clear differences in punitiveness towards cannabis offenders and offences involving so-called ‘hard’ drugs such as crack cocaine and heroin (Rossi, Berk & Campbell, 1997). Participants were significantly more likely to support harsher penalties for crack offences than cannabis offences. Similar differences were observed between drug possession offences and drug trafficking offences, with participants showing significantly higher levels of support for the punishment of drug traffickers when compared to drug users. Rossi, Berk and Campbell (1997) attributed these findings to federal sentencing guidelines, as public opinion was found to closely correspond with the degree of punishment indicated in law. This may suggest that attitudes towards drug punishment simply reflect what society (i.e. lawmakers) tells the public to think, rather than scientific evidence, which often conflicts with the law (Nutt, King & Phillips, 2010). This is referred to as the ‘normative consensus’ theory (Rossi, Berk & Campbell, 1997).

Many international examples also provide some level of support for the general idea of the ‘normative consensus’ theory. Kirby and Jacobson (2014) explored the attitudes of focus groups in England and Wales towards the sentencing and incarceration of various different examples of drug offenders. Specifically, the research investigated differences in attitude between drug possession, supply, and trafficking offences, and between offences involving either Class A or B substances. In response to vignettes describing more serious offences, such as the trafficking of Class A drugs like heroin, participants had the tendency to support sentences much harsher than current sentencing guidelines, with some members indicating

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support for prison sentences of up to 50 years. By comparison, current law in the United Kingdom indicates offenders are more likely to receive a prison term of 25 years. Likewise, when presented with examples of drug supply offences, particularly of the Class A drugs, attitudes were more punitive than most sentences issued by the courts. Although these responses were often harsher than the law itself, the general trends in which offences were more deserving of punishment were consistent, suggesting a shared intuition in relative drug crime seriousness. Lastly, in response to all offences related to cannabis (a Class B drug in the United Kingdom), attitudes were found to more closely correspond with current practices, with almost all participants supporting little to no sanction for cannabis offenders.

As well as these findings, Kirby and Jacobson (2014) noted three key factors that were relevant to participants' decision making: drug type (Class A vs. Class B), offence type (possession vs. supply/trafficking), and drug quantity. Throughout the research on focus groups' attitudes towards drug crime, discussion was largely driven by how much harm the above factors had the potential to cause. For possession offences, participant discussion generally revolved around how much harm the drug had the potential to cause to one's physical and psychological wellbeing. Thus, participants were more likely to support punitive measures for Class A possession offences than Class B offences. Whether these distinctions were made due to the suggested implication that higher classes of drugs are more harmful, or from personal experience and knowledge, is not clear. Similarly, discussions on the topics of offence type and drug quantity revealed strong considerations of the level of harm. Larger scale instances of supply were seen as having more potential for harm, due to the number of people that could possibly be affected, either directly or indirectly, by distribution of a potentially harmful substance. Furthermore, most participants suggested that the higher the quantity, the more people adversely affected. Again, while the attitudes of these focus groups did not closely correspond with sentencing guidelines as the 'normative consensus' theory suggests (Rossi,

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Berk & Campbell, 1997), the general trends of public attitudes followed British law, as offences with longer sentences were seen by participants as more deserving of punishment than offences with shorter sentences. More importantly, however, was the consideration of harm that almost all participants displayed, suggesting the concept of harm has a large role to play in shaping public attitudes to drug offenders.

Research in New Zealand has revealed similar themes regarding public attitudes towards drug offenders. Durrant, Fisher and Thun (2011) investigated the connection between morality and responses to drug offenders. Their research found that public attitudes were significantly more punitive towards drug dealing offences than drug using offences, and more punitive towards methamphetamine offences than cannabis offences. Punishment severity was positively associated with a number of factors evident in previous international research such as social threat and individual harm, with moral attitudes and emotional warmth also showing some relevance across all offence and drug types. For cannabis offences, perceptions of moral wrongfulness significantly predicted punishment responses, while individual harm and societal threat predicted responses to cannabis use and cannabis sale offences respectively. For all methamphetamine offences, moral wrongfulness was a significant predictor of support for punishment, indicating that public attitudes towards drug offenders, regardless of the drug or offence type, are largely based on how morally wrong the action is perceived to be, although the threat to both the individual and society is also a common consideration.

Even though public perception has often been found to correspond with drug laws (Rossi, Berk & Campbell, 1997), there is little evidence suggesting that the legality of drugs is correlated with their actual potential for harm. Research by Nutt, King, Saulsbury and Blackmore (2007) and Nutt, King and Phillips (2010) led to the establishment of a drug harm scale, in which the harms that a number of commonly consumed drugs, both legal and illegal, had the potential to cause, were calculated and compared. Harm scores were calculated out of

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100, with higher scores indicating a higher level of harm, not just to the user, but also to society. Their research indicated that alcohol, heroin and crack cocaine were the most harmful drugs, while psychedelic drugs such as LSD and magic mushrooms were the least harmful, despite their classification as Class A drugs under New Zealand's Misuse of Drugs Act (1975). This suggests that although public attitudes may be based on drug legislation guidelines, these guidelines are not necessarily an accurate representation of how harmful certain drugs can be. While the physical costs of using some of the less harmful drugs may not be substantial, New Zealand and much of the Western world have felt the financial costs associated with prohibition and the strict enforcement of drug law. For example, in New Zealand alone, estimates suggest the overall cost of enforcing drug law is approximately \$1.5 billion per annum (McFadden, 2016). This figure incorporates all expenses relevant to drug-related interventions, from the operation of rehabilitation and health centres to police enforcement and, if necessary, processing offenders through the criminal justice system.

Instead of drug law being based on the principle of harm, many scholars claim that the initial criminalisation of many illicit substances in Western societies is largely attributable to concerns about race, culture, and social change, rather than the risks of harm caused by their consumption to the user and society (Courtwright, 2003; Durrant & Thakker, 2003). For example, early Australian legislation prohibiting the personal use of opium only applied to Aboriginal and foreign populations, particularly Chinese people, due to the negative association presented in the media between these cultural groups, opium use, and violence (Manderson, 1999). These groups were seen to be metaphorically polluting the nation, through their violations of Western social norms and values, and thus both the cultures and substances associated with them were vilified by the media and subsequently by the public. Over time, these laws were expanded to include the entire population, and eventually countries such as New Zealand followed suit in prohibiting opium use.



Similar patterns of drug criminalisation are apparent in both the United Kingdom and the United States. In the UK, heroin use has historically been associated with the unemployed, ‘deviant’ youth corrupting the ‘respectable’ youth (Buchanan & Young, 2000), whereas cannabis, introduced and popularised in the US by Mexican immigrants in the early 20th century, was historically linked to violence, particularly by minority groups, leading to its prohibition in the mid-1900s (Warf, 2014). Subsequently, New Zealand outlawed these, and many other substances. Although over time public attitudes towards some of the so-called ‘soft’ illicit drugs have become increasingly lenient (Stafford, Gould, Hinds & McKeganey, 2003), in New Zealand the illegality of the majority of psychoactive substances has remained, and the use of most, if not all, illegal drugs is still seen as a violation of societal norms and values. Therefore, from a historical perspective, the reasons underlying the legality of drug use are more comparable in many respects to offences such as flag burning, public nudity, and incest, in that they violate social norms and our intuitions of moral wrongfulness, rather than violent offences in which harmfulness has been the primary justification.

**Comparison to other kinds of offences.** Across research internationally and in New Zealand, the themes moral wrongfulness, and to a certain extent, harmfulness, are prominent considerations in how the public determines how harsh they believe sentences for drug offenders should be. However, when looking at attitudes towards other kinds of offenders, these considerations can vary greatly.

Although there is not a significant amount of research concerning public perceptions of crime seriousness in New Zealand, the few studies that have been conducted have generally found that, unsurprisingly, serious violent and sexual crimes are perceived as the most serious offences. Bratcher (1997) presented 181 New Zealanders with a number of crime vignettes and asked them to indicate how serious they believed the offence to be. On a seven-point scale, with higher scores indicating higher levels of seriousness, crimes such as murder, child

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molestation, rape and armed robbery were perceived as by far the most serious offences, with drug possession and petty crime the least serious. Consistent with previous literature (Kirby & Jacobson, 2014), drug supply was seen as far more serious than possession, rated just above assault in crime seriousness. These trends, particularly in relation to the seriousness of violent crime and drug-related crime, have been reflected in a number of other pieces of research in New Zealand (Davis & Kemp, 1994; Spier, Southey & Norris, 1991), suggesting that, in general, violent crimes against the person are seen by the public as more serious than most drug offences. Regarding how participants believed these offenders should be punished, there was a positive, significant relationship between crime seriousness and support for custodial sentences, with respondents reaching the consensus that serious violent offences such as murder are worthier of imprisonment than drug possession. However, the drug-related vignettes did not specify the type or quantity of the substance, meaning participants may have diverged in their interpretation of the offence.

Internationally, these findings have generally been supported. In studies in the United Kingdom, Ireland and the United States, crimes of violence and interpersonal crimes are usually perceived as the most serious crimes, while petty crimes, victimless crimes and minor drug offences are perceived as the least serious (Cullen et al., 1995; Levi & Jones, 1985; O'Connell & Whelan, 1996). In the Irish sample, a sexual taboo offence, underage sex, was included in the vignettes, and ranked as one of the least serious crimes, on a level comparable to petty crime (O'Connell & Whelan, 1996). Additionally, crimes found to be high on the crime seriousness scale were accompanied by low standard deviations, suggesting a high level of consensus amongst the public in ratings of violent interpersonal offences. Finally, as with Bratcher's (1997) New Zealand study, positive correlations were found between perceived crime seriousness and support for punishment, providing support for the notion that perceptions

of crime seriousness are at least a partial indicator of punitiveness (Cullen et al., 1995; Levi & Jones, 1985).

A particular area of interest in the current study is identifying whether or not the factors that underlie punitive attitudes towards drug offenders are similar to the factors predicting punitiveness towards violent offenders. Based on previous research into the topic, it would appear that these factors differ, in that attitudes towards drug offenders are equally as concerned with issues of morality as they are with physical or psychological harm, particularly in the case of less harmful drugs such as cannabis, whereas attitudes towards violent offenders are much more centered around the issue of harm. However, does this difference also apply to other kinds of non-violent acts?

In much of the world, public attitudes towards the morality of homosexuality and same sex marriage have become increasingly positive. Between 2002 and 2013, the percentage of people that indicated support for the statement ‘homosexuality should be accepted by society’ increased in much of the Western world, from the United States to European nations such as Spain and Germany (Hadler & Symons, 2018). This has been reflected in the number of countries that have legalised same sex marriage in recent years (Chamie & Mirkin, 2011; Flores & Barkley, 2015). However, in many nations, predominantly in Asia, Africa and Eastern Europe, this trend is not occurring, with many states showing a decrease in acceptance of homosexuality (Hadler & Symons, 2018). Hadler and Symonds (2018) identified a number of variables that could at least partially explain these divergent trends. They found that education and age were positive predictors for support for the acceptance of homosexuality, whereas religious affiliation was a negative predictor of homosexuality support. In other words, younger, more educated people are more likely to display pro-homosexuality attitudes, while religious individuals are more likely to be opposed to homosexuality. However, the magnitude of the latter relationship varied greatly depending on the religious affiliation. These findings

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suggest that religiosity or, perhaps more broadly, ‘traditional’ moral beliefs are a strong influence in determining negative attitudes towards homosexuality.

Cross-culturally, these findings are strongly supported. Evans and Scott (1984) assessed and compared crime seriousness appraisals conducted by participants from two distinctive cultures, the United States and Kuwait. While there was only a small difference in perceived crime seriousness ratings of violent and property offences, a significant difference in opinion was found in relation to the seriousness of moral offences. American respondents generally rated moral offences as the least serious offence type, whereas on average, Kuwaiti participants believed moral offences to be on a level almost comparable to the seriousness of violent offences. The magnitude of this difference was demonstrated by the average seriousness rating of adultery, a moral offence. For Americans, a married woman committing adultery had a mean crime seriousness rank of 32 out of 37. In contrast, Kuwaitis ranked the same offence as the most serious, with a mean rank of 1, above offences such as rape and manslaughter. Evans and Scott (1984) attribute this cross-cultural variability to differences in religiosity, as individuals who scored high on a religious fundamentalism scale were subsequently more punitive towards moral offences, and, on average, Kuwaiti participants were significantly more religious than the American sample. This trend was consistent both between and within the samples and highlights the importance of religiosity and traditional values in shaping punitive attitudes towards crime, particularly those which involve a moral violation of some kind.

As discussed, there is notable cross-cultural (and historical) variance in punishment responses towards drug offences, and research has suggested that drug offences may have more similarities to certain sexual practices than violent offences in that moral responses are typically driven more by perceptions of wrongfulness than harmfulness (Adriaennsen et al., 2018; Stylianou, 2003; Warr, 1989). In addition to these cross-cultural differences, there are also significant *within*-country differences in attitudes towards various sexual practices and to drug

use. While there is generally a consensus on the seriousness of harm offences within a society, there is often a greater disparity in attitudes towards drug use and sexual practices, with demographic differences such as age and gender resulting in differences in opinion (Hadler & Symonds, 2018; Kwan, Chiu, Ip & Kwan, 2002). To unpack the reasons for these within-population differences, and to tease out the differences between wrongfulness and harmfulness, Moral Foundations Theory and the Moral Foundations Questionnaire, a measure of individual-level moral reasoning differences, will be used to compare and contrast attitudes towards drug offences with both harm offences and ‘taboo’ sexual practices.

### **Moral Intuition and Moral Foundations Theory**

Although there has been much research into the factors influencing public punitiveness, the consideration of moral orientations in shaping individual differences in punitive beliefs is a relatively new area of interest. To assess the moral reasons behind punitiveness, the present study will draw heavily on Moral Foundations Theory (Graham et al., 2011; Haidt, 2008; Haidt, 2012). Moral Foundations Theory is largely based on four key claims. First, Moral Foundations Theory draws on the idea of nativism, that is, that humans are born with, through evolutionary processes, innate moral values (Graham et al., 2011). This initial moral code, consisting of information-processing mechanisms, allows us to process, solve and adapt to certain situations. While this moral code is innate, Graham et al.’s (2011) second claim is that this code is malleable, often changing and developing through cultural learning, resulting in cross-cultural differences in behaviour (Haidt, Koller & Dias, 1993). For example, young people born in Western and Eastern societies are said to have a shared set of innate universal learning modules, but constant exposure to culture-specific situations and traditions result in different sets of moral codes and different interpretations of wrongfulness.

The third claim that underpins Moral Foundations Theory is intuitionism. Intuitionism is the idea that, generally, moral judgments occur both effortlessly and rapidly, below the level of consciousness, and subsequently inform our conscious thought. These intuitive moral judgments are the result of the aforementioned processes of nativism and cultural learning. It is suggested that effortful moral reasoning is our attempt to explain our innate moral thoughts (Graham et al., 2011). The fourth and final claim is that these moral intuitions can fall into distinct categories or domains, a concept referred to as moral pluralism. Based on cross-cultural research by Graham, Haidt and Nosek (2008), and Graham, Nosek, Haidt, Iyer, Koleva and Ditto (2011), five key domains, referred to as moral foundations, were found to underlie our attitudes towards issues of morality. Each of the five moral foundations is said to be a result of numerous adaptive challenges faced by our distant ancestors, and the endorsement of different sets of moral foundations, it is suggested, results in differences in moral reasoning and decision-making. The five moral foundations proposed by Graham et al. (2011) are harm, fairness, loyalty, authority, and purity (See Table 1)<sup>1</sup>.

Table 1

*The Five Moral Foundations*

Foundation	Description	Violation example
Harm	Care, kindness and the protection of the vulnerable	Harming others
Fairness	Fair treatment, justice and trustworthiness towards others and society	Deception, infidelity
Loyalty	Loyalty to the groups to which one belongs	Betrayal of one's group, acting in one's personal interests
Authority	Obedience and deference to authority and tradition	Disrespecting authority

<sup>1</sup> A sixth moral foundation, liberty, was proposed by Haidt (2012), although as only preliminary work has been done on this foundation and its effects, it was excluded from the current study.

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Purity	Upholding cultural standards of purity and decency	Impure practices as defined by one's culture (e.g. bodily degradation)
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*Source:* Graham, Haidt, & Nosek, 2009

The harm foundation refers to how concerned one is about the suffering of others (Haidt, Graham & Joseph, 2009). When applied to crime, the harm foundation encompasses the care and compassion individuals feel for the victims of crime and is one of the primary considerations when determining how severe a sentence should be (Canton, 2015). However, as Canton (2015) highlights, our reactions to harm are selective, and differ from person-to-person and from crime-to-crime, thus requiring the acknowledgment of the other four moral foundations when explaining moral reactions to crime and punishment. The second moral foundation, fairness, encompasses a number of themes such as justice, cooperation, gratitude and guilt. In terms of our reaction to crime, fairness may explain our desire for retribution, as in many cases criminal offenders are seen to unjustly profit from their actions (such as a burglar gaining resources without 'earning' them). Therefore, in order to restore the balance of justice, offenders must be punished, preferably in a way that is proportionate to the damage they have caused (Canton, 2015).

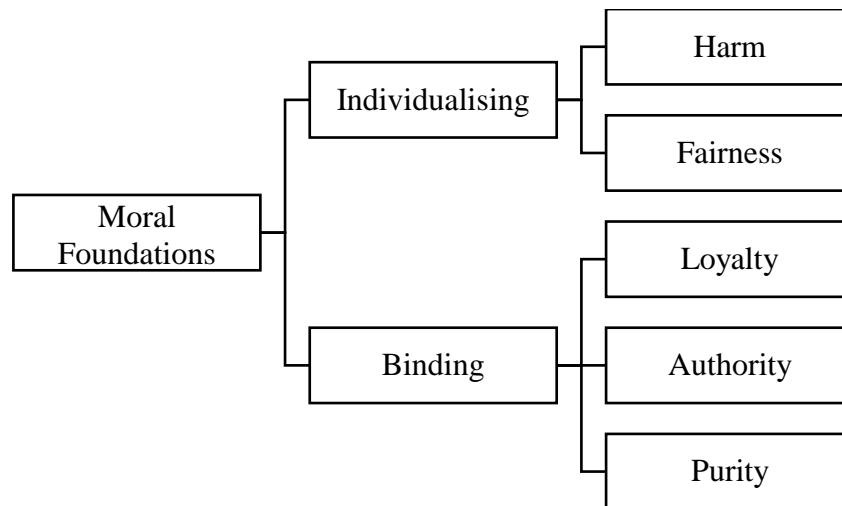
Thirdly, the moral foundation of loyalty prioritises virtues such as patriotism, group-based cooperation and trust. Individuals generally feel great pride towards the groups to which they identify with, and thus betrayals of the group are looked down upon. Canton (2015) states that punitive attitudes towards offenders are an expression of loyalty to the group (society), and subsequently, those who displayed disloyalty by breaking the law are no longer seen as members of the group (Canton, 2015). Authority, the fourth moral foundation, refers to how willing one is to obey and respect authoritative figures and organisations. Links between authority and punishment are clear, as the majority of punishments are both decided by and

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carried out by the government. Crime, therefore, represents the subversion of authority (Canton, 2015). Finally, the purity moral foundation refers to how one is concerned with cultural sensitivity and sacredness. Haidt (2012) states that feelings of disgust are a direct response to acts that violate perceived ideals of purity and/or sacredness. This is reflected in how many people commonly refer to offenders using labels such as “scum” and “filth” (Canton, 2015, p. 65). Canton (2015) states that some crimes are more likely to trigger purity than others. For example, crimes that violate social and cultural taboos such as incest and prostitution are most commonly seen as purity violations, particularly in the eyes of religious groups.

Although the five moral foundations each relate to a different moral domain, Haidt (2008) broadened the definition of morality by proposing a distinction between ‘individualising’ and ‘binding’ moral foundations (see Figure 1). The individualising moral foundations, harm and fairness, are grouped together due to their focus on individual welfare as the primary unit of moral value. Under this individualist approach, empathy and care for others, particularly the vulnerable, as well as justice and equality is seen as the focal point for moral concern, whereas concepts such as authority and tradition are less important as they often conflict with the idea of equality and individual freedom. In contrast, the binding moral foundations of loyalty, authority and purity, place more emphasis on groups as the focus of moral value. Care for others is more centered on concern for the members of one’s group(s), from family to members of religious congregations to cultural groups. Under this binding approach to morality, individuals are expected to make sacrifices and play certain roles in the groups to which they belong, and while individual concerns such as harm and fairness may be considered at times, they are seen in terms of the collective, rather than the individual.





*Figure 1.* Moral foundations subgroups.

While the current study will primarily focus on the relationship between moral foundations and responses to crime, much of the previous research utilising Moral Foundations Theory has focused on other factors, such as political ideology and cultural differences. Across three studies, Graham, Haidt and Nosek (2009) found that liberals showed a tendency to place emphasis on the individualising moral foundations of harm and fairness when presented with a number of moral and political statements, whereas conservatives tended to rely more heavily on the three binding moral foundations: loyalty, authority and purity. For example, liberals showed greater support for the statement: “compassion for those who are suffering is the most crucial virtue” (Graham et al., 2011, p. 22), while conservatives were more supportive of the statement: “respect for authority is something all children need to learn” (Graham et al., 2011, p.22).

Further research built on these findings, with studies such as Feinberg and Willer (2013) using frames to solidify the links between liberals and individualising moral foundations, and conservatives and binding foundations. Participants were presented with a newspaper article on environmental issues either through a harm-based frame, or a purity-based frame. Whereas the harm-based frame emphasised the destruction that humans were causing the environment,

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the purity-based frame focused more on the pollution and contamination of the air and water. Accompanied with these articles were pictures depicting either environmental destruction (e.g. a destroyed forest, cracked land) or pollution (e.g., a city covered in smog, a person drinking contaminated water). Following exposure to the purity-based frame, conservatives showed more concern for environmental issues while liberals' attitudes remained unchanged, providing support for the association of purity with conservatism and the lack of association with liberalism. Exposure to the harm-based frame increased neither liberals' nor conservatives' pro-environmental attitudes.

Related to these findings is the link between moral foundations and attitudes towards climate change. Studies have found that the individualising foundations of harm and fairness, often more exclusively endorsed by liberals than conservatives, are also strong, positive predictors of willingness to take action on climate change, such as through sustainable consumption (Dickinson, McLeod, Bloomfield & Allred, 2016; Vainio & Mäkinen, 2016; Watkins, Aitken & Mather, 2016). Additionally, the binding moral foundations of loyalty and authority were associated with less climate-friendly attitudes (Dickinson, McLeod, Bloomfield & Allred, 2016), and in one study, were even linked to the active avoidance of global climate issues (Vainio & Mäkinen, 2016). Subsequently, due to the similarities in which moral foundations were most influential, connections were established between climate-friendly consumption and political ideology, with liberals showing more willingness to engage in climate-related issues than conservatives. This connection, however, was only considered an indirect association rather than a causal one, as moral foundations were found to directly underlie attitudes towards both climate change and political orientation independently of each other (Vainio & Mäkinen, 2016).

Widening the scope, Day, Fiske, Downing and Trail (2014) presented both liberals and conservatives with various political statements on a number of topics, from education to

immigration. Each statement was randomly presented through the frame of any of the five moral foundations. An example of a political statement on the economy through a ‘fairness’ frame was “economic freedom is a cornerstone of what it means to be American” (Day, Fisk, Downing & Trail, 2014, p. 1562). It was hypothesised that there would be two different ways in which the frames would affect the political views of both groups. The first hypothesis was that presenting pro-attitudinal issues through the frame of a relevant moral foundation (harm and fairness for liberals, and loyalty, authority and purity for conservatives) would entrench or strengthen their opinion on the issue. Meanwhile, the second hypothesis stated that presenting counter-attitudinal issues through the frame of a relevant moral foundation would alter their political position on the topic. Across two separate studies on liberals and conservatives, the *entrenching* hypothesis was strongly supported, as members of both political groups had their viewpoints strengthened when presented with a statement that they agreed with through a relevant frame. The *persuasion* hypothesis, however, was only partially supported. Overall, there is strong support for the association between liberals and individualising moral foundations, and conservatives and binding moral foundations, with more recent research starting to suggest that moral foundations have the potential to facilitate changes in attitudes towards a number of political issues (Feinberg & Willer, 2013; Day, Fiske, Downing & Trail, 2014). Similar findings, particularly in relation to the link between binding foundations and conservative political orientation, have been found to also been evident in cross-cultural research (Ji & Janicke, 2018).

Research has also more generally compared levels of endorsement of moral foundations across gender and education. An empirical review of the literature surrounding morality and gender, conducted by O’Fallon and Butterfield (2005), found that in just less than half the studies, females were reported to behave more ethically than males. Thus, Anderson, Zuber and Hill (2015) explored if and how these findings extended to Moral Foundations Theory. In

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a sample of students, Anderson, Zuber and Hill (2015) found differences in how the moral foundations of fairness and loyalty were viewed, with females perceiving the two foundations as similar constructs, while males viewed them as one and the same. Overall, students, regardless of gender or area of study, relied significantly more on the fairness foundation than any of the other three (the moral foundation of harm was not included in the study) when making moral judgments. No significant differences were found between accounting and business students in any domain. These findings suggest that although Moral Foundations Theory successfully and reliably measures which moral foundations are most endorsed by an individual, research utilising the MFQ needs to consider the ways in which moral foundations can be interpreted differently, especially in the case of gender. Finally, despite finding no differences in moral foundation endorsement between students in different areas of study, there remains the scope to investigate the relationship between moral foundations and education further. A potentially interesting area for exploration could be to test whether individuals of different education levels endorse different moral foundations when faced with moral decision making. Therefore, the current study will include level of education, as well as gender, as independent variables.

Although there has been little research regarding the links between moral foundations theory and attitudes to crime, two key pieces of research in this area provide the basis of much of the current study. Firstly, Silver and Silver (2017) investigated the moral reasons behind why conservatives are often more punitive than liberals. While past studies had offered up numerous reasons for these differences in attitude, none had used Moral Foundations Theory to explain this divergence in opinion. Two independent samples were tested, one comprised of undergraduate sociology and criminology students and the other representing a more general population. Participants in both studies completed a number of measures concerning punitiveness, moral foundation endorsement, religious conservatism, and general demographic

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information. The punitiveness scale used did not focus on any particular offence types, but rather measured respondents' punitiveness towards crime in general. Religiosity and conservatism were measured using self-identification scales, while the MFQ was used to measure participants' endorsements of the five moral foundations.

Analyses of these variables provided support for Silver and Silver's (2017) hypotheses, as they found that the endorsement of the binding moral foundations (loyalty, authority, purity) was associated with both conservative and punitive attitudes, while the endorsement of the individualising foundations of harm and fairness was associated with liberalism and lower levels of punitiveness. These findings are attributed to intrinsic differences in moral reasoning between liberals and conservatives. Conservatives, it is suggested, see crime as an attack on the 'collective conscience', and a violation of group norms, even though the victims of crime are often individual. In contrast, liberals tend to emphasise the rights and concerns of both victims and offenders and may see harsh punishments as violations of the harm and fairness foundations, leading to a weaker punitive response. This provides some insight into why issues such as punishment are so heavily debated and argued, and why people so strongly defend their opinions on divisive issues, as the intuitive nature of moral judgment makes it difficult for individuals to appreciate others' perspectives, especially when these opinions are based on completely different moral reasoning processes.

Additional research in this area has also looked at examining the role of specific moral foundations on punishment responses to different types of offences. Based on Haidt's (2008; 2012) assertion that moral judgments reflect intuitive moral concern for three different entities: individuals, groups, and the 'divine', Silver (2017) proposed three types of punitiveness depending on the victim: punitiveness towards crimes with an individual victim, a collective victim, and a 'divine' victim. Furthermore, Silver (2017) distinguished between punitiveness towards offenders, and punitiveness towards crimes.

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Punitiveness towards offenders, referred to as offender-centered punitiveness, relates to punitiveness towards either offenders in general, or towards different groups of offenders (such as juvenile offenders), regardless of the specifics of the crime itself. It was hypothesised that the endorsement of binding moral foundations would be the strongest motivator behind offender-centered punitiveness, as much of the previous research into moral responses to crime has observed that criminal offenders are often seen as threats to societal norms and values, and importantly, binding moral foundations are rooted in group-based concerns (Durkheim, 1965; Haidt, 2012; Tyler & Boeckmann, 1997). Individualising moral foundations may also play some role in offender-centered punitiveness, as for individuals who more strongly endorse individualising foundations, crime may be perceived as an attack on the rights of the individual victim, increasing punitiveness, regardless of group-based concerns and values. In contrast, individualising foundations may instead reduce punitiveness, as the endorsement of foundations centered around harm and fairness may lead to the consideration of the rights of the offender. This may be particularly prevalent in the evaluation of offences with sentences that are perceived to be disproportionate to crime, as the harsh punishments may be seen to cause unnecessary suffering for the offender, violating the foundations of fairness and harm.

Victim-centered punitiveness concerns punishment responses towards crimes with different kinds of victim(s). Under victim-centered punitiveness, Silver (2017) suggests that there are three victim types that heavily differ in their perceived moral violations, and thus there are differences in how punitive an individual may feel towards them. Crimes against individuals (e.g. manslaughter, assault), crimes against groups (e.g. tax evasion, treason), and crimes against the 'divine' (e.g. drug use, incest) each activate a different moral concern, and thus may each relate to a different moral foundation. It was hypothesised by Silver (2017) that crimes against individuals would be more likely to activate punitiveness in people who endorse

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individualising moral foundations, whereas the endorsement of binding moral foundations may increase punitive responses to crimes against groups and the ‘divine’.

These hypotheses were tested by Silver (2017), using data from a sample of 915 participants. Scales measuring punitiveness towards both offence and victim types, as well as scores on the Moral Foundations Questionnaire were collected and analysed. Additionally, control variables that commonly correlate with punitiveness such as racial resentment and fear of crime, as well various demographic variables were collected, to identify their roles in influencing punishment responses. In general, the above hypotheses and assertions were supported. The binding moral foundations of authority and purity were positively related to offender-centered punitiveness, while fairness was negatively associated with offender-centered punitiveness, suggesting that moral concerns about societal norms and values are a significant influence in driving offender-centered punitiveness. Harm, it is suggested, was insignificant due to the consideration for the moral concern of both victims and offenders balancing each other out. Victim-centered punitiveness was also found to be strongly correlated with the hypothesised moral foundations. Notably, individual victim punitiveness was positively related to the harm foundation, loyalty and authority were positive correlates of punitiveness towards collective victims, and divine victim punitiveness was predicted by endorsement of the purity foundation. These findings demonstrate how different moral foundations can shape punitiveness towards distinct offender and victim types. Of interest to the current study is the potential role purity plays in predicting punitiveness towards offences of a ‘divine’ nature.

Despite a lack of substantial quantitative research other than Silver (2017) investigating the association between moral foundations and punishment responses towards ‘divine’ offenders, there are several studies which provide a level of theoretical support for the proposed relationship. As previously mentioned, the activation of the purity foundation is often the result

of the exposure to situations or stimuli which are perceived to be unnatural or disgusting (Haidt, 2012; Harper & Harris, 2017). One common example of an offence that falls under this category is drug use. As discussed, the endorsement of the purity foundation was found, in Silver's (2017) study, to predict punitiveness towards divine offences. Included in this category was drug offending. This hints at a relationship between purity and drug offending, and while there is a lack of research directly supporting the link, studies have consistently found an association between drug offenders and disgust, a common reaction to acts that are perceived as impure (Boyd, 2012; Clifford & Wendell, 2016; Haidt, 2012; Pickard, 2017).

Historically, a range of different sexual practices (e.g., homosexuality) have also been prohibited due to the belief that they are unnatural and/or disgusting (Oaks, 1978), and although many of these offences have since been legalised, the notion that certain sexual acts are impure remains. For example, Gray and Keeney (2015a) found that, when asked to describe scenarios which they believed to be examples of purity violations, participants most commonly generated sexual practices such as 'adultery' and 'prostitution', which were once prohibited but are now legal in many places. Additionally, various studies have looked more closely at disgust reactions to sexual behaviours. Haidt, Koller and Dias (1993) presented participants with an example of a taboo sexual practice, incest between two consenting adults, and asked them to describe and justify their emotional response to the act. Overwhelmingly, the vignette evoked feelings of disgust, even though it was explicitly stated that no physical or emotional harms were associated with the hypothetical act. Other studies have used disgust as a priming mechanism to increase feelings of moral wrongfulness, with Adams, Stewart and Blachar (2014) finding that when exposed to a disgust-evoking odour, participants rated practices such as same-sex marriage and the use of pornography as significantly more immoral than participants in a neutral setting.



Barnett, Öz and Marsden (2017) touched more generally on this relationship by testing the association between homophobic attitudes and the endorsement of either binding or individualising moral foundations. An additional variable, political orientation, was included due to the significant amount of prior research that has found a positive link between conservatism and negative attitudes towards same-sex relationships (Morrison & Morrison, 2003). Across two studies, homophobia was found to have a significant positive relationship with conservative beliefs and attitudes. This association was found to be largely mediated by moral foundations, with binding moral foundations (purity, authority, and loyalty) predicting both pro-conservative attitudes and homophobic beliefs, and individualising foundations (harm and fairness) predicting positive attitudes towards homosexuality. In the research, a two-factor model of Moral Foundations Theory was used, making it difficult to make the distinction as to which of the individualising and binding moral foundations were most influential in guiding homophobic beliefs. However, based on previous research which has highlighted the links between religiosity, purity, and negative responses to ‘taboo’ sexual practices (Adams, Stewart & Blachar, 2014; Hadler & Symons, 2018; Haidt, Koller & Dias, 1993; Harper & Harris, 2017), there is a strong indication that the association between binding foundations and feelings of moral outrage towards these practices may be particularly reliant on the purity foundation.

While much of the research on the applicability of Moral Foundations Theory has proved useful in predicting individual differences in responses of different contexts, there remains some disagreement over the core aspects of the theory. Many critics argue that the five moral foundations proposed by Haidt (2008; 2012) are insufficient in distinguishing one’s morality from another, and propose other ways to conceptualise the two contrasting domains of morality. For example, Sinn and Hayes (2017) offer an alternative approach to the binding and individualising domains, proposing Evolutionary-Coalitional Theory (ECT) as a way to differentiate between the ideological differences of conservatives and liberals. Under the ECT,

individualising foundations are instead described as ‘universalising’ motives, widening the scope from the egocentric approach of Haidt (2008; 2012) to include universal concerns such as nature and humanity. Binding moral foundations are replaced by ‘authoritarian motives’ and are used to explain both the in-group focus seen under the MFT, as well as outgroup antagonism that is so often observed in moral issues. Sinn and Hayes’ (2017) research using ECT found it explained differences in conservatism that MFT failed to explain, but as the theory is still early in its development, further research is needed before justifying its inclusion in the current study.

Another common critique of MFT is that differences in the moral concerns of liberals and conservatives cannot be simplified as an individual vs. group issue, as it is suggested that liberals are also group-oriented to a certain extent, and it is instead the way in which groups are perceived that drives moral concern (Janoff-Bulman & Carnes, 2013). Finally, it has been suggested that in certain cases, the five moral foundations proposed by Haidt (2012) overlap in their definitions (Gray & Keeney, 2015b). For example, acts defined as purity violations under MFT (e.g. homosexuality) can be perceived by conservatives as violations of the harm foundation, blurring the lines between the two domains, and making the reliability of the MFT unclear. Despite this, MFT remains well supported and the MFQ is still regarded as one of the better measures of individual moral concerns, and thus it will be used in the current study.

### **The Present Study**

The aim of the present study is to build on the results by Silver (2017) and Silver and Silver (2017) by exploring the role of different moral foundations on attitudes towards the punishment and criminalisation of different types of crime, with a focus on drug offences. Based on prior research, a number of specific hypotheses were made.

Based on the idea that people’s punishment responses are tied to their moral evaluations of particular acts it is hypothesised that:

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1. There will be a significant positive relationship between participants' levels of moral outrage and their assignment of punishment across offence types.
2. There will be a significant positive relationship between participants' levels of moral outrage and support for criminalisation across offence types.

Additionally, based on the findings of Silver and Silver (2017) it is hypothesised that:

3. Higher scores on the binding moral foundations will predict greater punitiveness across offence types, and greater support for criminalisation.

Based on research by Silver (2017) and the proposed theoretical link between specific moral foundations and particular transgressions it is hypothesised that:

4. Higher scores on the purity moral foundation will predict greater moral outrage, and more punitive responses to drug offences, and greater support for the criminalisation of drug offences.
5. Higher scores on the harm foundation will predict greater moral outrage, and more punitive responses to acts that involve the threat or infliction of harm on others, and greater support for the criminalisation of these acts.
6. Higher scores on the purity foundation will predict greater moral outrage and more punitive responses to acts that relate to sexual behaviour, and greater support for the criminalisation of these acts.

### **Overview of Studies**

To test the six hypotheses, two online studies were conducted. The first study utilised a convenience sample of largely criminology students enrolled at Victoria University of Wellington. In the second study, following an evaluation of the results of the first study, minor changes were made to the methodology and a general population sample of participants was accessed through Amazon Mechanical Turk (MTurk). The two studies were approved by the Victoria University of Wellington human ethics committee (application #26068).

### Study 1

#### Method

**Participants.** A total of 118 participants anonymously completed the survey online. 44 (37.3%) of the participants were male and 74 (62.7%) were female. Participants' highest completed level of education varied, with 50.8% of participants reporting that they had completed secondary school, 32.2% having finished an undergraduate degree, and 11% having completed postgraduate studies. Although the study was open to the general public, a New Zealand undergraduate student population was targeted. This is reflected by the average age of participants ( $M = 25.19$ ,  $SD = 9.79$ ).

**Measures.** The survey was divided into four sections. Section 1 was comprised of several demographic questions, including gender, age, highest level of education and ethnicity. In Section 2, participants were shown eight criminal offending vignettes and answered three questions about their response towards each offence. Section 3 contained the Moral Foundations Questionnaire, and Section 4 asked participants to indicate their political and religious beliefs.

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**Vignettes.** Participants' levels of moral outrage and punitiveness towards different kinds of drug and harm offences were measured using eight crime vignettes. Four vignettes described instances of drug offending, including cannabis use and supply, and methamphetamine use and supply, while the other four vignettes described instances of the infliction of harm. These offences included manslaughter, assault, threat to harm, and robbery. Examples of vignettes included "*Bob smokes a cannabis cigarette at a party*" (drug offence – cannabis use) and "*Leo holds a knife to someone on the street and asks them to hand over their wallet and mobile phone*" (harm offence – robbery) (see Appendix B for a full list of vignettes). After being presented with each vignette, participants were posed three questions relating to how morally outraged they felt by the action, and how harshly they believed the offender deserved to be punished.

First, participants were asked "*how morally outraged were you by this action?*", with responses measured on a seven-point scale (1 = not at all, 7 = extremely). The second question "*how much do you think this individual should be punished for this action?*" was also measured on the same seven-point scale. Finally, participants were asked "*to what extent do you agree that this individual should be sent to prison for their action?*", with responses again measured on a seven-point scale (1 = strongly disagree, 7 = strongly agree) (see Appendix C for full response scales). The first question was as a measure of participants' levels of moral outrage towards each offence type, with a higher score indicating a greater amount of moral outrage. Scores for the second and third questions were summed, giving an overall punitiveness score, with a higher score indicating higher levels of punitiveness. The punitiveness scale, consisting of two items, displayed strong internal reliability ( $\alpha = .89$ ). To combat any potential priming biases stemming from the presentation of the questions, the order of the vignettes was randomised for each participant.

***Moral Foundations Questionnaire.*** The Moral Foundations Questionnaire (MFQ) is divided into two parts, each comprised of 16 questions (Graham, Haidt & Nosek, 2009) (see Appendix A). Part 1 asks participants to state how relevant each of 16 individual statements are to them when they decide whether something is right or wrong, using a six-point scale ranging from ‘not at all relevant’ to ‘extremely relevant’. Each statement corresponds to one of the five moral foundations (harm, fairness, loyalty, authority, or purity). For example, participants were asked how relevant “*whether or not someone was cruel*” is to deciding how wrong an action is. This measures their level of endorsement of ‘cruelty’ under the moral foundation of ‘harm’. If a participant responded ‘extremely relevant’, this indicates that harm is an important consideration they make when deciding how wrong an action is. One of the 16 statements in Part 1 (“*whether or not someone was good at math*”) was a ‘catch’ item, forcing participants to respond using the bottom end of the scale, thus catching out participants who were not completing the questionnaire properly by only responding with the upper end of the scale.

Part 2 of the MFQ has a similar structure, although rather than asking how relevant statements are to their moral decision-making, it asks participants to state their level of agreement (or disagreement) with 16 statements, using a six-point scale ranging from ‘strongly disagree’ to ‘strongly agree’. Again, each statement corresponds to one of the five moral foundations, with items such as “*people should be loyal to their family members, even when they have done something wrong*” measuring the endorsement of the ‘loyalty’ foundation, and items such as “*chastity is an important and valuable virtue*” measuring the endorsement of the ‘purity’ foundation. Another ‘catch’ item (“*it is better to do good than bad*”) was included to catch out participants who were exclusively using the first three response options.

For each moral foundation, the relevant items from the MFQ were summed, giving an overall score. All five of the moral foundation subscales consisted of six items (three from each

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part), with the subscales of purity ( $\alpha = .79$ ) and authority ( $\alpha = .77$ ) demonstrating good internal reliability, the loyalty subscale ( $\alpha = .65$ ) approaching acceptable reliability, and the subscales of harm ( $\alpha = .56$ ) and fairness ( $\alpha = .51$ ) displaying moderate reliability. Following this, subscales were created for binding and individualising moral foundations. The binding subscale, consisting of purity, authority and loyalty, displayed good internal reliability ( $\alpha = .84$ ), while the individualising subscale, consisting of harm and fairness, demonstrated acceptable internal reliability ( $\alpha = .69$ ).



***Political and Religious Ideology.*** The final section, comprised of just three questions, concerned participants' political and religious ideologies. First, participants were asked to place themselves on the political spectrum using a seven-point scale ranging from 'very liberal' to 'very conservative'. The other two questions were related to religiosity, with one question directly asking participants how religious they considered themselves to be, from 'not at all religious' to 'extremely religious', and the other asking participants to indicate how regularly they attend religious services (other than weddings and funerals) using a six-point scale from 'not at all' to 'more than once a week'. Responses on these two questions were summed to create a religiosity scale, with a higher score indicating a higher level of religiosity. The religiosity subscale displayed good internal reliability ( $\alpha = .83$ ).

***Procedure.*** The survey was uploaded via the online distribution software *Qualtrics*. It was then advertised online to anyone aged 18 and over, primarily during undergraduate criminology lectures at Victoria University of Wellington, but also through social media (Facebook and Reddit) (see Appendix D for recruitment blurb). While a student population was initially targeted, to ensure a large enough sample size, the survey was later opened up to members of the general public. An information page was provided to participants before the presentation of the survey, outlining the general aims of the research and the rights of the participants (see Appendix E). It also warned participants about the potentially disturbing nature of some of the vignettes. After the submission of their response, participants were debriefed on the main aims of the research (see Appendix G). Completion of the survey was taken as consent to their participation. Following the collection of an adequate number of responses, data collection was closed, assessed, and the responses were analysed using SPSS.

**Analysis.** The analysis plan was as follows. First, to test Hypothesis 1, that there will be a significant positive relationship between moral outrage and punitiveness, a correlation between participants' total moral outrage and total punitiveness accumulated across all eight offence vignettes was run. Hypothesis 3 states that higher scores on the 'binding' moral foundations will predict greater levels of punitiveness across both offence types. To test this, hierarchical linear regression analyses were conducted, in which demographic and control variables were entered in the first step, and 'individualising' and 'binding' scores from the MFQ were entered in the second step. Following this, to test Hypothesis 4, that higher scores on the 'purity' moral foundation will predict greater levels of moral outrage and punitive responses to drug offences, and Hypothesis 5, that higher scores on the 'harm' foundation will predict greater levels of moral outrage and punitiveness to harm offences, further hierarchical linear regressions were run. For both models, Step 1 variables included the various demographic and control variables, while scores on each of the five individual moral foundation subscales were introduced in the second step.

Participants who either did not complete the questionnaire within seven days, or were found to have not completed the questionnaire sufficiently (i.e. missing data), had their responses removed from the dataset as to avoid any issues of missing or unreliable data ( $n = 3$ ). This resulted in an analytic sample of  $N = 118$ . Collinearity diagnostics were run for all regression models. The bivariate correlation between the individualising and binding foundations was non-significant ( $r = .041$ ), suggesting that collinearity was unlikely to be an issue in testing the third hypothesis. Diagnostics confirmed that multicollinearity was unlikely to be biasing the model as the Variance Inflation Factor (VIF) did not exceed 1.42 for any of the models using the individualising and binding foundations. There were, however, significant positive correlations between the two individualising foundations (harm and fairness), and among all three of the binding foundations (loyalty, authority, and purity) indicating that

collinearity may have been an issue in testing Hypotheses 4 and 5 (see Tables 6 and 7). The VIF was assessed for each measure in all the regression models using the individual foundations as predictor variables. Across all the models, the VIF did not exceed 2.8 for any of the predictor variables, therefore, it was concluded that collinearity was not a significant problem overall in Study 1 (Field, 2009).

### Results

To test Hypothesis 1, that there would be a significant positive relationship between levels of moral outrage and participants' punishment responses, a correlation between total punitiveness and moral outrage was run. The two variables were found to be strongly, positively correlated,  $r(116) = .75, p < .001$ , indicating that as a person exhibited more moral outrage towards a given action, they subsequently felt more punitive towards the offender.

Depicted in Table 4 are the zero-order correlations among all dependent and independent variables. Hypothesis 1 was supported for both offence types, as punitiveness and moral outrage were positively associated with each other in response to drug and harm offenders. Additionally, the individualising moral foundations of harm and fairness were positively correlated, as were the binding foundations of loyalty, authority and purity. Finally, conservatism was found to be negatively associated with both of the two individualising moral foundations respectively. Individually, the three binding moral foundations (loyalty, authority, and purity) were all found to positively associate with conservative beliefs.

Following this, Hypotheses 3, 4 and 5 were tested. Hypothesis 3 states that higher scores on the binding moral foundations will predict higher scores of overall punitiveness. Hypotheses 4 and 5 state that higher scores on the 'purity' moral foundation will predict more moral outrage and greater punitiveness towards drug offences, while higher scores on the 'harm' foundation will predict higher levels of moral outrage and punitiveness towards instances of harm

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offending. Regression analyses were calculated to measure the role that each of the five moral foundations, as well as various other demographic variables, played in shaping levels of punitiveness and moral outrage towards different drug and harm offenders. The results of these analyses are displayed in Tables 5-7.

Regression analyses for all offenders are displayed in Table 5. In Step 1, age, gender, education, conservatism and religiosity were used as predictor variables. These five variables were responsible for 23% of the variance in punitiveness responses ( $F(4, 113) = 8.40, p < .001$ ), and 19% of the variance in moral outrage ( $F(4, 113) = 6.47, p < .001$ ). Consistent with prior research, conservatism ( $\beta = .41, p < .01$ ) and religiosity ( $\beta = .25, p < .01$ ) predicted overall punitiveness to the offenders. Conservatism ( $\beta = .24, p < .01$ ) and religiosity ( $\beta = .25, p < .01$ ) also predicted overall moral outrage, as did gender (female) ( $\beta = .31, p < .01$ ). In Step 2 the levels of endorsement for both individualising and binding foundations were included as additional predictor variables. The addition of these two variables significantly increased the amount of variance explained to 29% for punitiveness (overall model:  $F(6, 111) = 7.34, p < .001$ ) and 29% for moral outrage (overall model:  $F(6, 111) = 7.27, p < .001$ ). When all variables were included, conservatism ( $\beta = .31, p < .01$ ), religiosity ( $\beta = .19, p < .05$ ), and the endorsement of binding foundations ( $\beta = .27, p < .01$ ) were all significant predictors of overall punitiveness. For moral outrage, gender (female) ( $\beta = .21, p < .05$ ), religiosity ( $\beta = .18, p < .05$ ), and the endorsement of binding foundations ( $\beta = .34, p < .01$ ) were all significant predictors. In sum, in support of Hypothesis 3, and consistent with the results of Silver and Silver (2017), individuals who more strongly endorsed the binding moral foundations were also significantly more punitive across the offences, whereas there was no relationship between the individualising foundations and punishment responses.

Regression analyses for drug offenders are displayed in Table 6. Again, age, gender, education, conservatism, and religiosity were used as predictor variables in Step 1. The five

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variables accounted for 29% of the variance in punitiveness responses ( $F(4, 113) = 11.34, p < .001$ ), and 24% of the variance in moral outrage ( $F(4, 113) = 8.82, p < .001$ ). As hypothesised, conservatism ( $\beta = .39, p < .01$ ) and religiosity ( $\beta = .32, p < .01$ ) predicted punitiveness towards drug offenders. Moral outrage to drug offending was also predicted by conservatism ( $\beta = .28, p < .01$ ) and religiosity ( $\beta = .32, p < .01$ ), as well as gender (female) ( $\beta = .24, p < .01$ ). In Step 2 the levels of endorsement for all five moral foundations (harm, fairness, loyalty, authority, and purity) were included as predictor variables. The addition of these five variables significantly increased the amount of variance explained to 46% for punitiveness (overall model:  $F(9, 108) = 10.03, p < .001$ ), and to 41% for moral outrage (overall model:  $F(9, 108) = 8.14, p < .001$ ). When all variables were included, religiosity ( $\beta = .19, p < .05$ ), conservatism ( $\beta = .19, p < .05$ ), and the endorsement of the authority ( $\beta = .22, p < .05$ ) and purity ( $\beta = .37, p < .01$ ) foundations were all significant positive predictors of punitiveness. Additionally, the moral foundation of loyalty ( $\beta = -.23, p < .05$ ) was found to be a significant, negative predictor of punitiveness towards drug offences. For moral outrage, purity ( $\beta = .44, p < .01$ ) was a significant positive predictor of moral outrage, whereas loyalty was a negative predictor ( $\beta = -.25, p < .05$ ). Consistent with the results of Silver (2017), and in support of Hypothesis 4, individuals who more strongly endorsed the moral foundation of purity were also significantly more morally outraged and punitive towards drug offences, whereas neither harm nor fairness displayed any level of significance.

Finally, regression analyses for harm offences are displayed in Table 7. Step 1 used age, gender, education, conservatism and religiosity as predictor variables. These initial predictor variables were responsible for 11% of the variance in punitiveness responses ( $F(4, 113) = 3.32, p < .05$ ), and 9% of the variance in moral outrage ( $F(4, 113) = 2.81, p < .05$ ). Unsurprisingly, conservatism ( $\beta = .33, p < .01$ ) predicted punitiveness, while gender (female) ( $\beta = .29, p < .01$ ) predicted moral outrage towards harm offences. In Step 2, the levels of

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endorsement for the five moral foundations of harm, fairness, loyalty, authority, and purity were included as predictor variables. The addition of these variables significantly increased the amount of variance explained to 22% for punitiveness (overall model:  $F(9, 108) = 3.27, p < .001$ ), and 26% for moral outrage (overall model:  $F(9, 108) = 4.12, p < .001$ ). When all the variables were included, the authority ( $\beta = .27, p < .05$ ) and purity ( $\beta = .31, p < .05$ ) foundations were the only significant positive predictors of punitiveness, while loyalty ( $\beta = -.35, p < .01$ ) was the only negative predictor. For moral outrage, purity was a significant positive predictor ( $\beta = .46, p < .01$ ), whereas loyalty ( $\beta = -.26, p < .05$ ) was again a negative predictor. These findings are inconsistent with Hypothesis 5 and the results of Silver (2017), as harm was not a significant predictor of punitiveness or moral outrage, as instead the binding moral foundations of loyalty, authority, and purity, played a more significant role in predicting punitiveness and moral outrage towards harm offences.

## Discussion

Results from Study 1 provide support for most of our hypotheses. Hypothesis 1, that there would be a positive relationship between moral outrage and the support for punishment of offenders, was strongly supported, with moral outrage strongly correlating with support for punishment across all offence types. Hypothesis 3 was also supported, as higher scores on the binding moral foundation subscale were positively associated with increases in punitiveness across both drug and harm offending. Finally, there was strong support for Hypothesis 4 but not Hypothesis 5, as the endorsement of purity resulted in significantly increased punishment responses towards instances of drug offending, while the endorsement of the harm foundation was insignificant in predicting responses towards harm offending. Following the evaluation of the initial results, a second study involving a general population sample was conducted. Study 2 replicated many of the elements of Study 1, with the inclusion of a measure to consider attitudes towards the criminalisation of the various offence types. Additionally, a third offence

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type, 'taboo' sexual practices, was added to explore to what extent the responses towards drug offences are similar to those towards 'taboo' sexual practices.

### Study 2

#### Method

**Participants.** A total of 215 participants anonymously completed the survey online. 134 (62.3%) of the participants were male and 81 (37.7%) were female. Participants' highest completed level of education varied, with 64.2% of participants indicating they had completed either a bachelor's or associate degree, 21.9% having graduated high school, and 13% having completed a master's degree. For Study 2, a more general population was targeted. Thus, the average age of participants ( $M = 34.17$ ,  $SD = 10.24$ ) was higher than Study 1. Although the samples were tested independently, both studies included measures of participants' moral reactions towards criminal offenders, their endorsement of all five moral foundations, levels of conservatism and religiosity, and various other demographic characteristics. By analysing two different samples, the validity of the findings could be more easily gauged.

**Measures.** As with Study 1, the survey was divided into four sections. Section One was comprised of several demographic questions, including gender, age, highest level of education and ethnicity. In Section Two, participants were shown twelve offence vignettes and answered the same three questions about their moral and punitive response, as well as an additional question on their beliefs about the criminalisation of the offence. Section Three contained the Moral Foundations Questionnaire, and Section Four asked participants to indicate their political and religious preferences.



**Vignettes.** The second section contained a questionnaire which measured participants' levels of moral outrage, punitiveness, and support for the criminalisation of a variety of drug and harm offences, and 'taboo' sexual practices. Four vignettes were concerned with drug offenders, and included cannabis use and supply, and methamphetamine use and supply, another four described instances of harm offending, and the final four vignettes outlined scenarios involving 'taboo' practices of a sexual nature. The harm offence vignettes related to manslaughter, assault, threat to harm, and robbery, while the 'taboo' sexual practices included public nudity, incest, homosexuality, and public indecency. The selection of these sexual practices was loosely based on Gray and Keeney (2015a), where all four of the aforementioned acts were commonly provided examples of violations of purity. These acts are referred to throughout the thesis as 'taboo' sexual practices because a significant proportion of the general population (depending on the specific act) would view these acts as violating their moral norms. However, in labelling these acts as such, no claim is being made that they *are* morally wrong or *should* necessarily be subject to punishment by the state. Examples of vignettes include "*Albert sells a bag of methamphetamine to someone for \$500*" (drug offence – methamphetamine use), "*Rebecca threatens to assault a co-worker during an argument at work*" (harm offence – threat to harm), and "*Brian masturbates in a public park during the afternoon in clear view of anyone who passes by*" ('taboo' sexual practice – public indecency) (see Appendix B for full list of vignettes).

After being presented with each vignette, participants were asked four questions relating to their moral outrage, punitiveness, and support for the criminalisation of the offence in question. First, participants were asked "*how morally outraged were you by this action?*" with responses measured on a seven-point scale (1 = not at all, 7 = extremely). The second question "*how much do you think this individual should be punished for this action?*" was also measured on the same seven-point scale. Thirdly, participants were asked "*to what extent do*

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*you agree that this individual should be sent to prison for their action?"* with responses again measured on a seven-point scale (1 = strongly disagree, 7 = strongly agree). Finally, participants were asked *"to what extent do you agree that these sorts of acts should be against the law and subject to punishment by the state?"* Responses were also measured on a seven-point Likert scale (1 = strongly disagree, 7 = strongly agree). The first question was used to calculate participants' levels of moral outrage towards each offence type, with a higher score indicating higher levels of moral outrage. Scores for the second and third questions were summed, giving an overall punitiveness score, with a higher score indicating higher levels of punitiveness. The punitiveness scale, consisting of two items, displayed strong internal reliability ( $\alpha = .91$ ). The final question measured participants' levels of support for the criminalisation of each offence, with a higher score indicating higher levels of support.

***Moral Foundations Questionnaire.*** The Moral Foundations Questionnaire (MFQ) is divided into two parts, each comprised of 16 questions (Graham, Haidt & Nosek, 2009). Part 1 asks participants to state how relevant each of the 16 statements are to them when they decide whether something is right or wrong, using a six-point scale ranging from 'not at all relevant' to 'extremely relevant'. Each statement corresponds to a different factor in one of the five moral foundations (harm, fairness, loyalty, authority, purity).

For example, participants were asked how relevant *"whether or not someone was cruel"* is to deciding how wrong an action is. This measures their level of endorsement of 'cruelty' under the moral foundation of 'harm'. If a participant responded 'extremely relevant', this indicates that they believe cruelty/harm is a crucial part of them deciding how wrong an action is. One of the 16 statements in Part 1 (*"whether or not someone was good at math"*) was a 'catch' item, as it forced participants to respond using the bottom end of the scale, thus catching out participants who were only responding using one end of the response scale.

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Part 2 of the MFQ has a similar structure, although rather than asking how relevant statements are to their moral decision-making, it asks participants to state their level of agreement (or disagreement) with 16 statements, using a six-point scale ranging from ‘strongly disagree’ to ‘strongly agree’. Again, each statement corresponds to one of the moral foundations, with items such as “*people should be loyal to their family members, even when they have done something wrong*” measuring the endorsement of the ‘loyalty’ moral foundation, and items such as “*chastity is an important and valuable virtue*” measuring the endorsement of the ‘purity’ foundation. Another ‘catch’ item (“*it is better to do good than bad*”) was included to catch out participants who were exclusively using the first three response options.

For each moral foundation, the relevant items from the MFQ were summed, giving an overall score. All five of the moral foundation subscales consisted of six items (three from each part), with the subscales of purity ( $\alpha = .88$ ), authority ( $\alpha = .81$ ), loyalty ( $\alpha = .78$ ), and harm ( $\alpha = .70$ ) demonstrating good internal reliability, and the subscale of fairness ( $\alpha = .65$ ) displaying moderate internal reliability. Following this, subscales were created for binding and individualising moral foundations. Both the binding subscale, consisting of purity, authority and loyalty ( $\alpha = .88$ ), and the individualising subscale, consisting of harm and fairness ( $\alpha = .75$ ), demonstrated strong internal reliability.

***Political and Religious Ideology.*** The final section, comprised of just three questions, concerned participants' political and religious ideologies. The first question asked participants where on the political spectrum they considered themselves, using a seven-point scale ranging from 'very liberal' to 'very conservative'. The other two questions were related to religiosity, with the first directly asking participants how religious they considered themselves to be, from 'not at all religious' to 'extremely religious'. The other asked participants to indicate how regularly they attend religious services (other than weddings and funerals) using a six-point scale from 'not at all' to 'more than once a week'. Responses on these two questions were summed to create a religiosity scale, with a higher score indicating a higher level of religiosity, and a lower score indicating low levels of religiosity. The religiosity subscale displayed good internal reliability ( $\alpha = .88$ ).

**Procedure.** Data was collected using an anonymous, worldwide, online survey, with participants recruited through MTurk (see Appendix D for recruitment blurb). The only requirement for potential participants was an understanding of the English language. Participants who completed the questionnaire were compensated \$1USD. Research suggests that MTurk is a consistent source of good and reliable data, with many studies in respected publications utilising the tool to gather participants (Sheenan, 2018). An information page was provided to participants before the presentation of the survey, outlining the general aims of the research and the rights of the participants (see Appendix F). It also warned participants about the potentially disturbing nature of some of the vignettes. Completion of the survey was taken as consent to their participation, with participants who did not fully complete and submit the questionnaires having their responses automatically withdrawn. Following the submission of the survey, participants were debriefed on the main aims of the study (see Appendix D). A total of 250 responses were initially collected.

**Analysis.** The analysis plan for Study 2 was as follows. First, to test Hypotheses 1 and 2, that there will be a significant positive relationship between overall moral outrage and punitiveness, and between overall moral outrage and support for criminalisation, simple correlational analyses were run. Next, to test Hypothesis 3, that higher scores on the ‘binding’ moral foundations will predict greater levels of punitiveness and greater support for criminalisation across all offence types, a hierarchical linear regression was run, in which the first step was comprised of various demographic and control variables, and the second step was comprised of ‘individualising’ and ‘binding’ scores on the MFQ. Next, Hypotheses 4, 5, and 6 were tested. These hypotheses state that higher scores on the ‘purity’ foundation will predict greater levels of moral outrage, punitiveness, and support for the criminalisation of both drug offences and ‘taboo’ sexual practices, and that higher scores on the ‘harm’ foundation will predict greater levels of moral outrage, punitiveness, and support for the criminalisation of harm offences. For these three models, hierarchical linear regressions were calculated, in which demographic and control variables were entered in the first step, and scores on the five individual moral foundations were entered in the second step.

All cases in which the questionnaire was completed insufficiently, such as participants who were caught out by the ‘catch’ questions in the MFQ or participants did not answer all of the questions, were dropped ( $n = 35$ ), resulting in an analytic sample of  $N = 215$ . Descriptive statistics for the analytic sample are reported in Tables 8 and 9.

Collinearity diagnostics revealed that multicollinearity was unlikely to be biasing the model as the VIF did not exceed 2.05 for any of the models using the individualising and binding foundations. There was, however, a significant positive correlation between the individualising moral foundations and the binding foundations, as well as between harm and all three binding foundations, indicating that collinearity may have been an issue in testing Hypotheses 4, 5, and 6. The VIF was assessed for each measure in all the regression models

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using the individual foundations as predictor variables. Across all of the models the VIF did not exceed 3.17 for any of the predictor variables, therefore it was concluded that collinearity was not a significant problem.

### Results

To test Hypothesis 1, that there would be a significant positive relationship between participants' levels of moral outrage and their preference for punishment, a correlation between total punitiveness and moral outrage was computed. The two variables were found to be strongly, positively correlated,  $r(213) = .84, p < .001$ , indicating that as a person exhibited more moral outrage towards an offence, they subsequently felt more punitive towards the offender. Similarly, to test Hypothesis 2, a correlation between moral outrage and levels of support for the criminalisation of offenders was run. The two variables were also strongly, positively correlated,  $r(213) = .77, p < .001$ , suggesting that feelings of moral outrage towards an offender are related to support for the criminalisation of the offence in question.

Table 10 depicts the zero-order correlations among all dependent and independent variables across the drug and harm offence, and 'taboo' sexual practice vignettes. Hypothesis 1 was supported for all three offence types, as punitiveness and moral outrage were positively associated with each other in response to all instances of drug, harm and 'taboo' sexual offending. Hypothesis 2 was also supported, as moral outrage was positively associated with support for the criminalisation of all three offence types. Across all offences, the individualising moral foundations of harm and fairness were strongly correlated with one another, as were the binding foundations of loyalty, authority and purity. Conservatism was positively correlated with all three of the binding foundations, and was negatively correlated with the fairness foundation. Likewise, religiosity was positively associated with the endorsement of the three binding moral foundations.

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Following this, Hypotheses 3, 4, 5 and 6 were tested. Regression analyses were calculated to measure the role that each of the five moral foundations, as well as various other demographic variables, played in shaping levels of punitiveness, moral outrage and criminalisation support towards the different offenders. The results of these analyses are displayed in Tables 11-14.

Regression analyses for all offenders are displayed in Table 11. In Step 1, age, gender, education, conservatism and religiosity are used as predictor variables. These five variables accounted for 32% of the variance in punitiveness responses ( $F(4, 210) = 24.81, p < .001$ ), 36% of the variance in moral outrage ( $F(4, 210) = 29.62, p < .001$ ), and 26% of the variance in support for criminalisation ( $F(4, 210) = 18.57, p < .001$ ). Consistent with previous research, conservatism ( $\beta = .23, p < .01$ ) and religiosity ( $\beta = .38, p < .01$ ) predicted overall punitiveness towards offenders, while age ( $\beta = -.27, p < .01$ ) was a negative predictor. The same three variables also predicted overall moral outrage, with conservatism ( $\beta = .26, p < .01$ ) and religiosity ( $\beta = .43, p < .01$ ) positively predicting moral outrage, and age ( $\beta = -.20, p < .01$ ) a negative predictor. Finally, support for criminalisation was also predicted by conservatism ( $\beta = .25, p < .01$ ) and religiosity ( $\beta = .34, p < .01$ ), and negatively predicted by age ( $\beta = -.14, p < .05$ ). In Step 2, the levels of endorsement for both individualising and binding foundations were included as additional predictor variables. The addition of these two variables significantly increased the amount of variance explained to 42% for punitiveness (overall model:  $F(6, 208) = 25.09, p < .001$ ), 49% for moral outrage (overall model:  $F(6, 208) = 33.16, p < .001$ ), and to 34% for support for criminalisation (overall model:  $F(6, 208) = 18.27, p < .001$ ). When all variables were included, age ( $\beta = -.23, p < .01$ ) was a negative predictor of overall punitiveness, whereas religiosity ( $\beta = .20, p < .01$ ), education ( $\beta = .13, p < .05$ ), and the endorsement of binding foundations ( $\beta = .39, p < .01$ ) were both positive predictors. For moral outrage, religiosity ( $\beta = .22, p < .01$ ), education ( $\beta = .15, p < .01$ ), gender (female) ( $\beta = .11, p < .05$ ),

and the endorsement of binding ( $\beta = .45, p < .01$ ) and individualising ( $\beta = .11, p < .05$ ) foundations were significant positive predictors, while age ( $\beta = -.13, p < .01$ ) was again a negative predictor. Finally, for criminalisation support, conservatism ( $\beta = .17, p < .05$ ), religiosity ( $\beta = .19, p < .01$ ), and the endorsement of both individualising ( $\beta = .14, p < .05$ ) and binding foundations ( $\beta = .32, p < .01$ ) were all significant predictors. In sum, in support of both Hypothesis 3 and the findings of Silver and Silver (2017), individuals who more strongly endorsed the binding moral foundations were also significantly more punitive towards all offence types.

Table 12 displays regression analyses for drug offenders. Age, gender, education, conservatism and religiosity were again used as predictor variables in Step 1, and accounted for 30% of the variance in punitiveness responses ( $F(4, 210) = 22.00, p < .001$ ), 32% of the variance in moral outrage ( $F(4, 210) = 24.49, p < .001$ ), and 26% of the variance in support for criminalisation ( $F(4, 210) = 18.18, p < .001$ ). Punitiveness towards drug offences was positively predicted by conservatism ( $\beta = .27, p < .01$ ), religiosity ( $\beta = .36, p < .01$ ) and education ( $\beta = .16, p < .01$ ), and negatively predicted by age ( $\beta = -.18, p < .01$ ). Similar trends were seen in moral outrage, with conservatism ( $\beta = .28, p < .01$ ) religiosity ( $\beta = .38, p < .01$ ), education ( $\beta = .18, p < .01$ ) positive predictors, and age ( $\beta = -.18, p < .01$ ) a negative predictor. Age, however, was not a significant predictor of support for the criminalisation of drug offenders, with only conservatism ( $\beta = .27, p < .01$ ) and religiosity ( $\beta = .33, p < .01$ ) acting as significant positive predictors. Levels of endorsement for each of the five moral foundations (harm, fairness, loyalty, authority, and purity) were added as predictor variables in Step 2. Subsequently, the amount of variance explained increased to 39% for punitiveness (overall model:  $F(9, 205) = 14.27, p < .001$ ), 42% for moral outrage (overall model:  $F(9, 205) = 16.22, p < .001$ ), and 34% for support for criminalisation (overall model:  $F(9, 205) = 11.75, p < .001$ ). With the inclusion of these five additional variables, religiosity ( $\beta = .17, p < .05$ ), conservatism



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( $\beta = .14, p < .05$ ), education ( $\beta = .20, p < .01$ ), loyalty ( $\beta = .24, p < .01$ ), and purity ( $\beta = .21, p < .01$ ) were significant positive predictors of punitiveness towards drug offences, while age ( $\beta = -.12, p < .05$ ) was a significant negative predictor. Regarding moral outrage, religiosity ( $\beta = .28, p < .01$ ), education ( $\beta = .22, p < .01$ ), loyalty ( $\beta = .19, p < .05$ ), and purity ( $\beta = .25, p < .01$ ) were again positive predictors, whereas age ( $\beta = -.13, p < .05$ ) was a negative predictor. Positive predictors for the support for the criminalisation of drug offenders were religiosity ( $\beta = .15, p < .05$ ), education ( $\beta = .16, p < .01$ ), loyalty ( $\beta = .21, p < .05$ ), and purity ( $\beta = .21, p < .05$ ). These findings generally support Hypothesis 4, as individuals who more strongly endorsed the purity foundation were significantly more likely to be punitive, feel morally outraged, and support the criminalisation of drug offenders.

Regression analyses for harm offences can be seen in Table 13. Predictor variables included in Step 1 were age, gender, education, conservatism, and religiosity. These five variables together explained 8% of the variance in punitiveness ( $F(4, 210) = 4.46, p < .05$ ), 10% of the variance in moral outrage ( $F(4, 210) = 6.00, p < .001$ ), and 2% of the variance in levels of support for the criminalisation of harm offences ( $F(4, 210) = .85, p = .50$ ). On an individual level, religiosity ( $\beta = .16, p < .05$ ) was a positive predictor of punitiveness, while age ( $\beta = -.22, p < .01$ ) was a negative predictor. Similarly, religiosity ( $\beta = .25, p < .01$ ) was the only positive predictor of moral outrage, and age ( $\beta = -.21, p < .01$ ) was the only negative predictor. None of the step 1 variables predicted changes in levels of support for the criminalisation of harm offences. Each of the five moral foundations were added as predictor variables in Step 2 of the analysis. The inclusion of the moral foundations as predictor variables increased the amount of variance explained in punitiveness to 22% (overall model:  $F(9, 205) = 6.34, p < .001$ ), moral outrage to 30% (overall model:  $F(9, 205) = 9.63, p < .001$ ), and support for criminalisation to 15% (overall model:  $F(9, 205) = 3.78, p < .001$ ). For punitiveness, the fairness foundation ( $\beta = .19, p < .05$ ) was a positive predictor, while age ( $\beta = -.20, p < .01$ ) was

a negative predictor. Regarding moral outrage, a different individualising foundation, harm ( $\beta = .33, p < .01$ ), was the only positive predictor, while again, age ( $\beta = -.18, p < .01$ ) was a negative predictor. For support for the criminalisation of harm offences, fairness ( $\beta = .28, p < .01$ ) was the only significant positive predictor. These findings provide minimal support for Hypothesis 5, as the harm foundation only predicted increases in moral outrage towards harm offences, as instead, individuals who more strongly endorsed the fairness foundation displayed greater levels of punitiveness and support for the criminalisation of harm offences.

Finally, regression analyses for ‘taboo’ sexual practices are displayed in Table 14. In Step 1, the predictor variables of age, gender, education, conservatism, and religiosity were accountable for 34% of the variance in punitive responses ( $F(4, 210) = 27.47, p < .001$ ), 40% of the variance in moral outrage ( $F(4, 210) = 34.92, p < .001$ ), and 27% of the variance in levels of support for criminalisation ( $F(4, 210) = 19.30, p < .001$ ). Four of the five predictor variables individually predicted punitiveness, with gender (female) ( $\beta = .12, p < .05$ ), conservatism ( $\beta = .25, p < .01$ ), and religiosity ( $\beta = .38, p < .01$ ) positive predictors, and age ( $\beta = -.28, p < .01$ ) a negative predictor. Similarly, gender (female) ( $\beta = .19, p < .01$ ), conservatism ( $\beta = .30, p < .01$ ), and religiosity ( $\beta = .42, p < .01$ ) were positive predictors of moral outrage, while age ( $\beta = -.12, p < .05$ ) was again a negative predictor. Finally, for the support for the criminalisation of ‘taboo’ sexual practices, conservatism ( $\beta = .24, p < .01$ ) and religiosity ( $\beta = .35, p < .01$ ) were significant positive predictors, whereas age ( $\beta = -.15, p < .05$ ) was a negative predictor. The addition of the five moral foundations as predictor variables in Step 2 increased the variance explained for punitiveness to 40% (overall model:  $F(9, 205) = 15.38, p < .001$ ), moral outrage to 54% (overall model:  $F(9, 205) = 26.89, p < .001$ ), and support for criminalisation to 35% (overall model:  $F(9, 205) = 12.01, p < .001$ ). For punitiveness, religiosity ( $\beta = .23, p < .01$ ) and the purity foundation ( $\beta = .35, p < .01$ ) were significant positive predictors, while age ( $\beta = -.24, p < .01$ ) was a negative predictor. Again, religiosity ( $\beta = .20, p < .01$ ), purity ( $\beta =$

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.47,  $p < .01$ ) as well as gender (female) ( $\beta = .13$ ,  $p < .05$ ) were significant positive predictors of moral outrage. Finally, for support for the criminalisation of ‘taboo’ sexual practices, religiosity ( $\beta = .20$ ,  $p < .01$ ) and purity ( $\beta = .38$ ,  $p < .01$ ) were positive predictors, and age ( $\beta = -.12$ ,  $p < .05$ ) was a negative predictor. These results are generally congruent with Hypothesis 6, as individuals who favoured the purity foundation were subsequently more punitive, more morally outraged, and more likely to support the criminalisation of taboo sexual practices.

### Discussion

Results from Study 2 are generally supportive of our hypotheses. Hypotheses 1 and 2 were strongly supported, as there was both a significant positive relationship between moral outrage and punitiveness, and between moral outrage and support for the criminalisation of offences in general. Hypothesis 3 was also supported, as the endorsement of binding moral foundations was associated with increases in moral outrage, punitiveness, and criminalisation support across all offence types. While results provided strong support for Hypothesis 4, with the endorsement of the purity foundation predicting increases in moral outrage, punitiveness and support for the criminalisation of drug offences, Hypothesis 5 was not fully supported, as the endorsement of the harm foundation was only related to increases in moral outrage towards harm offences, having no influence on levels of punitiveness or criminalisation support. Fairness, however, did predict increases in punitiveness and support for the criminalisation of harm offences. Finally, there was support for Hypothesis 6, as the endorsement of the purity foundation predicted significant increases in moral outrage, punitiveness, and support for the criminalisation of ‘taboo’ sexual practices.

### General Discussion

The main aim of this study was to investigate the factors that influence people’s punishment responses to different kinds of criminal offenders, and to identify whether or not

these factors differ depending on the offence type. In support of Hypotheses 1 and 2, there was a significant positive relationship between individuals' levels of moral outrage towards an offence and their preference for the harsher punishment of the offender, and a significant positive relationship between moral outrage and support for the criminalisation of an offence. These relationships were consistent across offence types and are reflective of the majority of research in this area that suggests that individuals' punishment responses are directly tied to their moral evaluation of how wrong a particular act is (Vidmar, 2002; Robinson & Kurzban, 2006). Likewise, there was a clear and obvious link between how strongly an individual supported the punishment of an offence, and how strongly they endorsed the criminalisation of said offence.

Hypothesis 3 was also supported, as participants who more strongly endorsed binding moral foundations were subsequently more morally outraged, more punitive, and more willing to support the criminalisation of all the offences presented in the study. This is consistent with the findings of Silver and Silver (2017) and strengthens the understanding that the endorsement of binding moral foundations is associated with punitive attitudes, regardless of the offence type, or the legality of the offence.

Hypotheses 4, 5 and 6, based on research by Silver (2017), proposed a theoretical link between the endorsement of specific moral foundations and particular transgressions, and were only partially supported. Hypothesis 4, that higher scores on the purity moral foundation would predict moral outrage, punitiveness, and greater support for the criminalisation of drug offences was supported in the current study, with regression analyses revealing purity as a strong positive predictor of the three aforementioned variables across both student and general population samples. Hypothesis 5 stated that the endorsement of the harm foundation would result in greater moral outrage, punitiveness, and support for the criminalisation of acts that involved the threat or infliction of harm. This was not supported by our findings as the harm

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foundation acted as a predictor of moral outrage towards harm offences in Study 2, but did not predict any other punishment responses across either study. Finally, Hypothesis 6, that higher scores on the purity foundation would predict greater moral outrage, punitive responses, and greater support for the criminalisation of ‘taboo’ sexual practices, was strongly supported, with hierarchical regression analyses identifying purity as the strongest predictor of all three responses. Together, these findings highlight purity as a common underlying factor behind punishment responses to both drug offences and ‘taboo’ sexual practices, one that is not present in response to harm offenders. This suggests that the evaluation of the crime seriousness of drug offences and ‘taboo’ sexual practices rely on a similar underlying mechanism in which the perceived seriousness of an offence is based on individual intuitions about the impurity of the act (Haidt, 2012; Harper & Harris, 2017). In contrast, punishment responses to offences involving the threat or infliction of harm may rely on much more complex processes, in which all five moral considerations outlined in the Moral Foundations Theory appear to play some role.

### **Moral Outrage, Punishment and Support for Criminalisation**

As hypothesised, there were correlations between participants’ levels of moral outrage towards a given offence, their assignment of harsher punishment for the offender, and their support for the criminalisation of the offence itself. These findings suggest that as individuals become morally outraged by a criminal or norm-breaking action, they subsequently feel that the act needs to carry with it some level of criminal sanction, and thus, the perpetrator is more deserving of punishment. This association between moral outrage, punishment and support for criminalisation is widely supported in the literature. Studies by Darley and Pitman (2013), and Tetlock (2002) have previously established that when people are presented with potentially harm-inducing scenarios, their initial reaction is generally one of moral outrage towards the offender. This reaction is said to be intuitive in nature and occurs when others act in ways

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which are perceived to violate social norms and values (Robinson & Kurzban, 2006). As a direct result of this outrage, and through the strong human tendency to want to punish wrongdoers, individuals respond with the desire for retributive justice, generally through the criminalisation of the offence, and the sentencing of the offender (Tetlock, 2002).

As demonstrated through the current study, this tendency not only applies to situations involving the infliction of harm, but also in the case of indirect moral transgressions with no clear, obvious, or immediate victim(s). In both the current study, and in Darley and Pitman (2013), responses to drug offending followed this trend, with moral outrage predicting support for the punishment and criminalisation of a range of drug offences. Additionally, this relationship can extend to acts which are not forbidden by law, as seen through the correlation between moral outrage, the assignment of punishment, and support for the criminalisation of ‘taboo’ sexual practices such as homosexuality, which arguably cause no harm, yet are sometimes perceived to violate social values or our notions of wrongfulness. Findings from the current study, as well as the plethora of previous research in the area demonstrates support for the idea of moral intuitionism, in that many of the processes underlying our attitudes towards crime and punishment, as well as any number of other social and political issues, happen below the level of consciousness, before informing our opinions (Graham et al., 2011). This provides some insight into how and why people have such strong attitudes on crime, and why these attitudes are not easily changed.

### **Binding Foundations, Punishment and Support for Criminalisation**

Consistent with previous research, the endorsement of binding moral foundations was found to predict increases in general punitiveness. Silver and Silver (2017) had previously established this link, finding that the endorsement of binding foundations was positively associated with both conservative and punitive attitudes. Additionally, they identified that the

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endorsement of individualising foundations was associated with decreases in conservatism and punitiveness. While the current study strengthens the former association, with regression analyses revealing that endorsing binding foundations predicts greater moral outrage, punitiveness and support for the criminalisation of all offence types, the latter association was not supported, as individualising moral foundations were not significant predictors of responses. These findings reflect the idea that intrinsic differences in how we process moral issues can significantly affect our active moral reasoning. Individuals who place emphasis on binding moral foundations when making moral decisions tend to promote group-oriented values such as self-control and loyalty, and may see crimes as a betrayal of these values, therefore making them more likely to support harsher punishments for deviant behaviours (Graham, Haidt & Nosek, 2009; Silver & Silver, 2017).

The effect is not limited to moral judgments of others' behaviour, with evidence suggesting that the endorsement of binding moral foundations may also have a preventative effect on one's own behaviour. For example, Silver and Abell (2016) looked at the relationship between moral foundations and self-reported deviant behaviour. Most notably, they found that support for binding foundations negatively predicted engaging in illegal acts such as stealing and fighting, the use of cannabis and other recreational drugs, as well as viewing pornography. This demonstrates the constraining nature of binding moral foundations, even for acts that are legal, especially when those legal acts are seen as betraying or undermining group norms and values of purity. Although this finding relates to self-reported behaviour, the general trend provides further insight into the tendency for binding foundation-oriented individuals to disapprove of deviant behaviour, and subsequently support the criminalisation of those actions. Individualising foundations were found to be mostly insignificant across both samples, only predicting increases in support for the criminalisation of offenders in general in Study 2.

Potential reasons for this significant result can be explored by looking deeper at the effects each individual foundation had on punishment responses.

### **Individual Foundations and Punishment Responses**

One of the key findings of the current study was the association between the purity foundation and punishment responses towards drug offences and ‘taboo’ sexual practices. Regression analyses across both studies showed that the endorsement of purity during the moral reasoning process predicted increases in moral outrage, punitiveness, and support for the criminalisation of both drug offences and ‘taboo’ sexual practices. These findings are consistent with the themes identified by Silver (2017), who found that the endorsement of the purity foundation predicted punitiveness towards offences with a ‘divine’ victim. Divine offences included incest, crack cocaine use, and prostitution, and are comparable to the offences included in the current study under drug and ‘taboo’ sexual offences. That purity predicts punitive attitudes towards both of these offence types implies a shared moral reasoning process underlying both offence types.

The role of purity in the formation of punishment responses to drug offences is widely supported in the literature. In the literal sense of the word, drug use is often perceived as impure due to the various means of drug administration, such as the use of needles, which are commonly associated with contamination and disease. Thus, the consumption of illicit substances may be met with disgust, resulting in moral outrage and punitive attitudes, especially in those who more strongly endorse purity when assessing moral issues (David, 2012; Haidt, 2012). More generally, media representations of drug users as deviants can drive public opinion towards the perception that all drug use is dirty and impure, strengthening punitive attitudes towards drug offenders (Boyd, 2002).



Likewise, the association between purity and punishment responses to ‘taboo’ sexual offences is strongly supported by past research (Gray & Keeney, 2015a; Harper & Harris, 2017). As hypothesised, Barnett, Öz and Marsden’s (2017) finding, that the endorsement of binding moral foundations predicts homophobic beliefs, may extend beyond issues of sexuality to encompass other ‘taboo’ sexual acts, with purity predicting moral outrage, punitiveness and the support for the criminalisation of the four ‘taboo’ sexual practices included in the current study (see Table 14). Previously, there had primarily only been theoretical links between disgust and negative attitudes towards these ‘taboo’ sexual practices outside of homosexuality and same-sex marriage (Haidt, Koller & Dias, 1993; Adams, Stewart & Blachar, 2014), but the current study provides greater support for the incorporation of purity into this relationship.

However, unlike Silver (2017), the harm foundation was not found to predict victim-centred punitiveness, reconfigured in the current study to offences involving the infliction of harm. One possible explanation for this insignificant result is that the moral concern for the victim of a harm offence may be balanced out by the concern for the wellbeing of the offender, especially when the punishment for an offence is perceived to be disproportionate to the seriousness of the offence (Silver, 2017). To test this theory, future research could include a measure of what participants assume the sentence is for each offence type, before asking them whether or not they believe the sentence is proportionate to the offence in question.

Additionally, regarding the current study, the harm offence vignettes used may have been seen as less serious in comparison to the most serious of offences (murder and serious assault, for example), and thus, participants may have had a less of a concern for the wellbeing of the victim and more concern for the rights of the offender. Piazza, Sousa, Rottman and Syropoulos (2018) stress the importance of injustice when making appraisals of harmfulness and moral wrongfulness. Across a series of harm offence scenarios, judgments of the level of inflicted harm were found to have some significance in distinguishing the immorality of an act,

but the overriding consideration was whether or not there was some justification for the act, even if it did cause some level of harm. This may have influenced the current study, as two of the four harm vignettes (“During a disagreement with an acquaintance, James punches him in the face” and “Rebecca threatens to assault a co-worker during an argument at work”) had an ambiguous level of justness, with the circumstances of the offences unclear. If this is the case, it would be expected that fairness, the moral foundation most related to feelings of injustice, would have some level of significance in predicting punishment responses. Although fairness was found to be a significant predictor of punitiveness and support for the criminalisation of harm offences in Study 2, this association was insignificant across the rest of the study, and so further research is needed to identify the importance of injustice appraisals in determining the wrongfulness of an offence.

One of the more unexpected findings from the current study was the role of loyalty in influencing punishment responses. While in the student sample, loyalty was found to be a significant negative predictor of moral outrage and punitiveness towards both harm and drug offences, in the general population sample it was found to be a significant positive predictor of moral outrage, punitiveness, and support for the criminalisation of drug offences. In other words, students who endorse the loyalty foundation during their moral decision-making are less supporting of the punishment of drug and harm offenders, yet in the general population sample, individuals who endorse loyalty are more likely to support the punishment of drug offenders. Although this relationship may appear contradictory, it may provide some insight into how different age groups relate to drug offenders. Drug use prevalence surveys both globally and in New Zealand consistently show that the percentage of young people who regularly use, or have used, illicit substances is far greater than older generations (United Nations Office on Drugs, & Crime, 2018). Additionally, young people are more likely to support the decriminalisation of illicit substances (Campbell, Twenge & Carter, 2017). With

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more of their peers using drugs, young people who more strongly emphasise loyalty when determining the moral wrongfulness of a drug offence may sympathise and relate with the offender, reducing the magnitude of their punishment response. In contrast, older people are less likely to identify with drug users due to their reduced prevalence, and therefore, those who endorse the loyalty foundation are more likely to see drug users as an ‘outgroup’ and worthier of punishment. However, findings regarding age in the general population sample contradict this theory, with older participants displaying less punitive attitudes towards offenders than younger participants, suggesting the effect of the loyalty foundation on punishment responses is a much more nuanced and complex process that requires further investigation. Possibilities for future directions could include assessing cross-cultural differences in the influence of loyalty on crime seriousness appraisals.

As well as negatively predicting punitive responses towards drug offences, the endorsement of the loyalty foundation in the student sample was also significantly associated with lower levels of moral outrage and less support for the punishment of offences involving the threat or infliction of harm (see Table 7). Unlike attitudes towards drug offenders, it is unlikely that a younger, student sample would feel more of an association with violent offenders than a general population sample, as harmful offences are generally seen as significantly more serious than any other offence types, and attitudes are more likely to be rooted in perceptions of harmfulness than wrongfulness (Robinson & Kurzban, 2006; Warr, 1989). One possible reason for the presence of this relationship in just the student sample is that, due to the means of data collection, the majority of the student sample was obtained from undergraduate criminology lectures. Past research has found that students majoring in criminology or criminal justice hold significantly less punitive views towards criminal offending than non-criminology majors (Falco & Martin, 2011). This is attributed by Falco and Martin (2011) to the liberalising nature of tertiary education, as well as the assumption that

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criminology students have a greater understanding of the causes of criminal and deviant behaviour than others, resulting in less punitive attitudes. For instance, a criminology student is more likely to be aware of the various systemic reasons as to why people commit crime, and thus may attribute less blame to the offender, and more to the wider social and structural causes of antisocial behaviour. Therefore, criminology students, such as those in our initial sample, may feel a sense of sympathy with harmful offenders and the circumstances surrounding their offending. Along with the endorsement of the loyalty foundation, this may explain why the student sample, in comparison to the general sample, had a lessened punitive response towards instances of harmful offending.

The associations found between the five individual moral foundations and punishment responses to different offence types allow us a greater understanding of how and why we punish wrongdoers. While it has been suggested that our preference for the punishment of an act directly relates to how harmful we believe the act to be, results from the current study indicate that this moral reasoning process is much more complex. Although considerations of harm may play a part, factors such as the perceived impurity of the offence, moral wrongfulness, and fairness appear to play a much bigger role in our punitive response, particularly in the case of drug offences and ‘taboo’ sexual practices. Currently, much of the debate around drug legalisation and decriminalisation centres on harm, with researchers such as Nutt, King and Phillips (2010) arguing in favour of the loosening of drug laws based on a harm-index. Yet this study shows that punitive public attitudes place less emphasis on the harmfulness of drugs, and instead rely more on perceptions of moral wrongfulness and impurity. This reveals some insight into why the drug debate is so polarising, with both sides of the debate deploying different moral reasoning processes, resulting in strong, yet vastly divergent opinions on how the law should define drug offending (Tatalovich & Wendell, 2018). By appealing more to

notions of wrongfulness than harmfulness, drug legalisation advocates may subsequently find more success in turning public opinion towards one of a less punitive nature.

### **Other Demographic Variables**

Past research has found that both religiosity and conservative political beliefs are associated with increases in general punitiveness and moral outrage towards deviant behaviour (Evans & Scott, 1984; Morrison & Morrison, 2003; Silver & Silver, 2017). This relationship has been shown to be particularly prevalent in cases of moral offending such as drug use and supply, and the involvement in various ‘taboo’ sexual practices (Barnett, Öz & Marsden, 2017; Hadler & Symonds, 2018). In the current study, these findings are strongly supported, with both religiosity and conservatism predicting increases in moral outrage, punitiveness and support for the criminalisation of general offending across both samples. More specifically, religiosity and conservatism were found to significantly predict increases in moral outrage, punitiveness and support for the criminalisation of both drug and ‘taboo’ sexual offences, but not harm offences. However, following the introduction of moral foundations in the analyses, the significance of this relationship either reduced significantly or was completely lost. This raises the suggestion that the association between religiosity, conservatism, and harsher punishment responses, particularly towards moral offences, is at least partially mediated by the endorsement of moral foundations. Barnett, Öz and Marsden (2017) had previously found that the endorsement of binding moral foundations mediated the relationship between conservatism and homophobia, and the current study suggests that this mediation may also extend to punishment responses towards a wide range of moral offences, from various ‘taboo’ sexual practices to drug use and supply.

Similarly, there is evidence to suggest that purity may play a role in the way religiosity predicts moral outrage and punitiveness towards drug users and suppliers. Many religions

prohibit and disapprove of the use of most psychoactive substances and numerous studies have found that religious commitment acts as a protective factor against substance use (Hope & Cook, 2001; Stylianou, 2004). As a result, individuals with religious beliefs both may be more likely to perceive drug offences as impure and more likely to strongly endorse the purity foundation, leading to higher levels of moral outrage, and greater support for the punishment and criminalisation of drug offences. This claim is consistent with the wider findings of the current study, as religiosity was found to strongly correlate with the endorsement of purity (see Tables 4 and 10), with regression analyses showing religiosity to be a positive predictor of punitiveness, moral outrage, and support for the criminalisation of drug offences (see Tables 6 and 12). However, to fully understand these relationships, further analysis is needed. One possibility for future researchers could be to use structural equation modelling (SEM), such as path analysis, to assess the influence that moral foundations can have in determining the relationship between religiosity, conservatism, and punitiveness.

As well as religiosity and conservatism, there were also a number of significant results regarding gender, age, and education. Across both studies, females were found to be somewhat more morally outraged towards offences in general than males. Additionally, in the student sample, females displayed higher levels of moral outrage in response to instances of drug and harm offending. However, in almost all cases, this significance was lost following the introduction of the moral foundations, suggesting the difference in moral outrage between genders can be at least partially explained by MFT. Past research on gender and moral foundations has found that women score higher than men on the endorsement of harm, fairness, and purity, reflecting commonly identified gender differences in levels of empathy (Davis, 1983) and disgust sensitivity (Druschel & Sherman, 1999). This is reflected in the current study to a certain extent, as purity, and in some cases, fairness, were found to be significant predictors of moral outrage across all offence types.

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In addition to gender, in the general population sample there were also significant differences in moral outrage, as well as punitiveness and support for criminalisation, by age. Surprisingly, results showed that older participants displayed less moral outrage and lower levels of punitiveness towards drug, harm, and general offending, and, in the case of ‘taboo’ sexual practices, less support for criminalisation. Even with the introduction of moral foundations into the analysis, these findings still showed some level of significance. This goes against established trends, as research has most commonly found that older people’s attitudes towards crime are generally more punishment-oriented than younger people (Wood & Viki, 2001). Age-related punitiveness is often attributed to differences in the fear of crime victimisation, as older people are more prone to fears about becoming the victims of crime than younger people (Hale, 1996). In the current study, however, this relationship was reversed, as older people were less punitive and morally outraged by instances of offending. One possible explanation for the inverse finding could be related to the characteristics of the sample used, as most participants were in their 20s or 30s (see Table 9 for mean age) and age-related punitiveness may be most relevant for much older generations’ attitudes. However, more research is needed to unpack the complex role that age may have in the formation of punishment responses, especially as, unlike conservatism, religiosity, and gender, this relationship appears to be independent of moral foundations.

Finally, in the general population sample, education was found to predict overall moral outrage, as well as punitiveness and moral outrage towards drug offences. This finding is inconsistent with most prior research. In general, individuals with lower levels of educational attainment display higher levels of punitiveness towards criminal offenders, while those with higher educational qualifications tend to be significantly less punitive (Langworthy & Whitehead, 1986; Pickett & Chiricos, 2012; Silver, 2017; Unnever & Cullen, 2010). Additionally, evidence of this association has been found across numerous contexts and

cultures (Gelb, 2011). While much of the previous research relates to punitiveness, given the relationship between punitiveness and moral outrage, one would have expected to find a similar trend regarding moral outrage and education. However, this was evidently not the case. Of particular interest, the finding that higher levels of education predicted increases punitiveness and moral outrage was only prevalent for drug offences, and not harm offences or ‘taboo’ sexual offences. There are several possible explanations for these results. First, the education variable may have been highly skewed, as 64.2% of participants fell into the same category of having completed either a bachelor’s or associate degree, while the top option, a doctoral degree or PhD, was only relevant to one participant. However, following the removal of this participant, the significance of the relationship remained robust, suggesting that other factors may have had more relevance. One possibility is that perhaps individuals with higher completed levels of education are less likely to use drugs, and therefore hold more negative views of drug offenders. While some previous research gives credence to the theory that education and lessened drug use are linked (Chatterji, 2006), the fact that this finding is so inconsistent with the majority of prior findings suggests that more research is needed in this area, especially as it relates to drug offending. To test this, future research could include self-reported drug use, in addition to education, as a predictor variable for punitiveness and moral outrage towards drug offenders. A larger, more representative sample may also lead to more consistent results.

### **Limitations and Directions for Future Research**

There are a number of potential limitations to this research. First, Study 1 predominantly employed a sample of undergraduate Criminology students from Wellington, and although a student sample was targeted, Criminology students may have a greater understanding of drug issues than students in other fields, and as a result their responses may not be fully representative of the student population. Second, both studies used hypothetical



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vignettes describing instances of various types of offending. While these vignettes did provide a simple description of the offences, they were relatively short, and longer vignettes may have evoked stronger and more accurate responses from participants. Other issues with the research design relate to the reliability of several of the scales, with some of the individual moral foundation subscales displaying average levels of internal reliability.

Future research into this area could widen the scope to include different offence types, different samples, and different approaches to measure the key variables, such as using or combining Clifford, Iyengar, Cabeza and Sinnott-Armstrong's (2015) approach to measuring moral foundations with the MFQ used by Graham, Haidt and Nosek (2009). Under this approach, participants would be provided with vignettes describing instances of moral violations and would then be asked to consider which of the five moral foundations they believed the acts to violate. Following this, participants could be asked to either rank or rate the moral violations in order of crime seriousness and how much the offender deserves punishment. This may provide researchers a clearer understanding of which moral foundation endorsements lead to the greatest punishment response. Simultaneously, it would allow us to compare and contrast punishment responses to a much wider range of offenders.

Furthermore, there is potential to assess the role emotions play in the relationship between moral foundations and punishment responses. Research has shown that the activation of certain moral foundations can result in specific emotions (Heerdink, Koning, van Doorn & van Kleef, 2018; Landmann & Hess, 2018). As mentioned throughout the study, feelings of disgust are a common reaction to perceived purity violations (Haidt, 2012; Landmann & Hess, 2018; Wagemans, Brandt & Zeelenberg, 2018), and research has commonly identified anger as occurring following a violation of the harm foundation (Landmann & Hess, 2018). As well as moral violations producing internal emotional reactions, Heerdink, Koning, van Doorn and van Kleef (2018) demonstrate that the inverse is also true, as observing the emotional reaction

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of others towards behaviours can help us to infer which moral standards are being violated. For example, observing someone reacting in disgust towards a behaviour leads the observer to infer that the behaviour was violating standards of purity, while a reaction of anger implies the behaviour violated moral standards of autonomy. Therefore, future research could expand the research on moral foundations and crime to encapsulate emotions as a key variable that also guides our attitudes and behaviour to some extent.

With evidence of a potential relationship between moral foundations, emotional responses, and attitudes towards crime, there is scope for research to investigate if evoking certain emotions and thus activating their associated moral foundations can significantly affect our moral judgment. As mentioned above, some emotional reactions have been found to be directly associated with moral foundations (Landmann & Hess, 2018). Therefore, it may be possible that, by priming an emotion such as disgust, people may be more inclined to utilise the moral foundation of purity, leading to more severe moral judgments. Past research suggests this may be the case, with evidence indicating that individuals prone to disgust sensitivity are more likely to make harsher moral judgments in responses towards crime (Jones & Fitness, 2006), and ‘taboo’ purity offences such as homosexuality (Olatunji, 2008; Horberg et al., 2009). While these examples used an innate measure of disgust sensitivity, preliminary research into the effectiveness on priming on moral judgments has had some success. For example, Schnall et al. (2008) exposed participants to a range of disgust primes before requiring them to complete a range of moral judgment questionnaires. Results showed that participants who had higher reported levels of private body consciousness prior to the experiment were more prone to the effects of the priming, rating potential moral violations as significantly more severe than both participants with low levels of private body consciousness and participants not exposed to the primes. Other research has found that conservatives are more susceptible to the influence of disgust on moral judgments than liberals (Eskine, Kacirik

& Prinz, 2011). This demonstrates that although priming can be effective in eliciting moral outrage and disgust, individual differences in moral reasoning make this a much more complex process. However, further research is needed to identify the roles each of these influences can play in moral judgment, and whether or not the other moral foundations without obvious emotional triggers, such as loyalty, authority and fairness, can also be primed in this way.

### **Conclusion**

How to address the issue of drug use and abuse is a significant challenge for modern society. Around the world, rationales for strict drug policy generally revolve around the perceived harmfulness of illicit substances, yet evidence suggests that the reasons behind why we punish drug offenders are much more complex. This study found that, across both a student and general population sample, issues of moral wrongfulness were common considerations when determining punitive responses towards offenders. The endorsement of binding moral foundations, those concerned with loyalty, authority, and purity, was a significant influence in the formation of punitive attitudes towards criminal offenders in general. Individually, the endorsement of the moral foundation of purity was the factor that had most influence in punitive responses towards both drug and ‘taboo’ sexual offenders, but not violent offenders. Trends were largely consistent across both the student and general population samples, however the endorsement of the loyalty foundation resulted in contrasting views of the deserved punishment of drug and harm offences. The endorsement of the harm foundation was insignificant across the majority of the study. These findings indicate that the reasons underlying our attitudes towards drug offenders are more related to our judgments of moral wrongfulness and impurity, rather than just our notions of harmfulness. This moral reasoning process is more comparable to our attitudes towards ‘taboo’ sexual offences than harm offences, suggesting that the reasons why we punish both drug offenders and offenders in

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general are much more complex than we think, relying on a combination of wrongfulness and harmfulness appraisals.

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## MORAL FOUNDATIONS AND CRIME

Table 2

*Means and Standard Deviations for Punitiveness and Moral Outrage by Offence Type*

Offence	Punitiveness (2-14)	Moral outrage (1-7)
Cannabis use	2.53 (1.60)	1.47 (1.10)
Cannabis supply	4.05 (2.71)	2.22 (1.61)
Methamphetamine use	4.97 (2.94)	3.33 (1.83)
Methamphetamine supply	8.19 (3.72)	4.28 (1.86)
Manslaughter	9.75 (3.04)	5.31 (1.54)
Assault	6.53 (2.74)	4.54 (1.57)
Threat to harm	5.56 (2.26)	4.36 (1.61)
Robbery	10.53 (3.03)	5.90 (1.11)
Offence	Punitiveness (8-56)	Moral outrage (4-28)
Drug offences	19.74 (8.95)	11.31 (5.19)
Harm offences	32.36 (8.61)	20.11 (4.49)

## MORAL FOUNDATIONS AND CRIME

Table 3

*Means and Standard Deviations by Demographic and for Each Moral Foundation*

Variable	Mean (standard deviation)
Age	25.24 (9.95)
Harm (MF)	27.86 (4.17)
Fairness (MF)	27.47 (4.01)
Loyalty (MF)	16.17 (4.80)
Authority (MF)	19.58 (5.61)
Purity (MF)	15.93 (5.88)
Individualising (MF)	55.33 (7.15)
Binding (MF)	51.68 (14.23)
Conservatism	2.61 (1.42)
Religiosity	3.57 (2.34)

# MORAL FOUNDATIONS AND CRIME

Table 4

*Correlation Coefficients Among Main Variables for Drug Offences*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Females		-.06	-.22*	-.08	-.18	.32**	.20*	.08	.16	.27*	.14	-.03	.25**	-.00
2 Age			.35**	.29**	.09	-.20*	-.19*	-.03	.05	.09	.24*	.23*	-.02	-.03
3 Education				.09	.01	-.24**	-.18	-.22**	-.03	-.09	.08	.09	-.02	.04
4 Conservatism					.09	-.23*	-.27**	.21*	.38**	.41**	.33**	.44**	.10	.19**
5 Religiosity						-.10	-.09	.09	.12	.31**	.31**	.35**	.05	.11
6 Harm (MF)							.53**	.18	.07	.17	.03	-.02	.26**	-.01
7 Fairness (MF)								.02	-.13	-.08	-.15	-.23*	.10	-.04
8 Loyalty (MF)									.65**	.57**	.15	.19*	.12	.02
9 Authority (MF)										.70**	.40**	.44**	.31**	.29**
10 Purity (MF)											.54**	.54**	.43**	.32**
11 Moral outrage (drugs)												.82**	.45**	.42**
12 Punitiveness (drugs)													.30**	.50**
13 Moral outrage (harm)														.65**
14 Punitiveness (harm)														

\* p < .05, \*\* p < .01

# MORAL FOUNDATIONS AND CRIME

Table 5

*Summary of Hierarchical Regression Analysis for Variables Predicting Punitiveness and Moral Outrage to All Offences*

	Punitiveness			Moral outrage		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Step 1						
Age	-.06	.13	-.04	.03	.08	.04
Female	2.10	2.73	.07	5.27	1.53	.31**
Conservatism	4.44	.94	.41**	1.42	.53	.24**
Religiosity	1.60	.55	.25**	.87	.31	.25**
Education	1.91	2.69	.07	1.15	1.51	.07
Step 2						
Age	-.04	.14	-.03	.05	.08	.06
Female	-.07	2.82	-.00	3.49	1.54	.21*
Conservatism	3.26	1.04	.31**	.74	.57	.13
Religiosity	1.23	.55	.19*	.62	.30	.18*
Education	2.67	2.65	.09	1.83	1.45	.12
Individualising MFs	.03	.19	.01	.11	.11	.09
Binding MFs	.29	.10	.27**	.20	.06	.34**

*Note.* For punitiveness:  $R^2 = .23^{**}$  for Step 1;  $\Delta R^2 .06^*$  for Step 2. For moral outrage:  $R^2 = .19^{**}$  for Step 1;  $\Delta R^2 .10^{**}$  for Step 2.

\*  $p < .05$ , \*\*  $p < .01$

# MORAL FOUNDATIONS AND CRIME

Table 6

*Summary of Hierarchical Regression Analysis for Variables Predicting Punitiveness and Moral Outrage to Drug Offences*

	Punitiveness			Moral outrage		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
Step 1						
Age	.07	.08	.08	.06	.05	.11
Female	1.26	1.52	.07	2.59	.92	.24**
Conservatism	2.40	.52	.39**	1.01	.32	.28**
Religiosity	1.21	.31	.32**	.69	.19	.32**
Education	.67	1.50	.04	.71	.91	.07
Step 2						
Age	.09	.07	.10	.07	.05	.13
Female	-2.03	1.56	-.11	.60	.96	.06
Conservatism	1.16	.56	.19*	.28	.34	.08
Religiosity	.70	.31	.19*	.36	.19	.16
Education	.09	1.42	.01	.33	.87	.03
Harm (MF)	.27	.20	.13	.08	.12	.06
Fairness (MF)	-.27	.19	-.12	-.07	.12	-.06
Loyalty (MF)	-.43	.19	-.23*	-.27	.12	-.25*
Authority (MF)	.35	.18	.22*	.17	.11	.18
Purity (MF)	.56	.19	.37**	.39	.12	.44**

*Note.* For punitiveness:  $R^2 = .29^{**}$  for Step 1;  $\Delta R^2 .17^{**}$  for Step 2. For moral outrage:  $R^2 = .24^{**}$  for Step 1;  $\Delta R^2 .17^{**}$  for Step 2.

\*  $p < .05$ , \*\*  $p < .01$

# MORAL FOUNDATIONS AND CRIME

Table 7

*Summary of Hierarchical Regression Analysis for Variables Predicting Punitiveness and Moral Outrage to Harm Offences*

	<i>Punitiveness</i>			<i>Moral outrage</i>		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
<b>Step 1</b>						
Age	-.14	.09	-.15	-.03	.05	-.06
Female	.84	1.69	.05	2.68	.90	.29**
Conservatism	2.00	.58	.33**	.41	.31	.13
Religiosity	.40	.34	.10	.18	.18	.09
Education	1.25	1.67	.07	.45	.88	.05
<b>Step 2</b>						
Age	-.11	.09	-.13	-.01	.04	-.03
Female	-1.90	1.84	-.11	.51	.93	.05
Conservatism	1.14	.66	.19	-.10	.33	-.03
Religiosity	-.00	.36	.00	-.11	.18	-.06
Education	.25	1.67	.02	.32	.85	.04
Harm (MF)	-.03	.24	-.01	.17	.12	.15
Fairness (MF)	.18	.23	.09	.07	.12	.07
Loyalty (MF)	-.63	.23	-.35**	-.25	.11	-.26*
Authority (MF)	.42	.22	.27*	.14	.11	.17
Purity (MF)	.46	.22	.31*	.35	.11	.46**

*Note.* For punitiveness:  $R^2 = .11^*$  for Step 1;  $\Delta R^2 .11^*$  for Step 2. For moral outrage:  $R^2 = .09^*$  for Step 1;  $\Delta R^2 .17^{**}$  for Step 2.

\*  $p < .05$ , \*\*  $p < .01$

## MORAL FOUNDATIONS AND CRIME

Table 8

*Means and Standard Deviations for Punitiveness, Moral Outrage and Support for Criminalisation by Offence Type*

Offence	Punitiveness (2-14)	Moral outrage (1-7)	Criminalisation (1-7)
Cannabis use	3.96 (3.22)	2.22 (1.81)	2.45 (2.03)
Cannabis supply	5.72 (4.19)	2.88 (2.08)	3.32 (2.33)
Meth use	6.85 (3.90)	3.80 (2.05)	4.34 (2.09)
Meth supply	9.81 (3.71)	4.59 (2.04)	5.44 (1.83)
Manslaughter	10.35 (3.16)	5.11 (1.68)	5.92 (1.29)
Assault	8.00 (3.11)	4.38 (1.64)	5.07 (1.68)
Threat to harm	7.03 (3.18)	4.27 (1.70)	4.51 (1.80)
Robbery	12.29 (2.00)	5.98 (1.20)	6.53 (.93)
Public nudity	5.29 (3.40)	3.39 (2.08)	3.80 (2.04)
Homosexuality	3.66 (3.36)	2.28 (2.07)	1.93 (1.83)
Incest	6.16 (3.97)	4.79 (2.12)	3.94 (2.22)
Public indecency	9.86 (3.14)	5.42 (1.59)	6.00 (1.28)
Offence	Punitiveness (8-56)	Moral Outrage (4-28)	Criminalisation (4-28)
Drug offences	26.35 (12.16)	13.49 (6.67)	15.55 (6.58)
Harm offences	37.67 (7.93)	19.74 (4.67)	22.04 (3.87)
Sexual offences	24.97 (10.34)	15.87 (5.98)	15.68 (5.05)

## MORAL FOUNDATIONS AND CRIME

Table 9

*Means and Standard Deviations by Demographic and for Each Moral Foundation*

Variable	Mean (standard deviation)
Age	34.17 (10.24)
Harm (MF)	27.60 (5.00)
Fairness (MF)	26.86 (4.58)
Loyalty (MF)	19.73 (6.26)
Authority (MF)	22.19 (6.40)
Purity (MF)	20.00 (7.92)
Individualising (MF)	54.46 (8.59)
Binding (MF)	61.91 (18.53)
Conservatism	3.53 (1.72)
Religiosity	5.08 (3.41)



## MORAL FOUNDATIONS AND CRIME

Table 10

*Correlation Coefficients Among Main Variables*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1 Females		.07	-.15*	-.06	-.03	.10	-.08	-.11	-.02	.04	-.01	-.01	.00	.03	-.09	-.08	.14*	.07	.07
2 Age			.05	.06	.07	.00	-.00	-.11	-.04	-.05	-.12	-.12	-.04	-.18**	-.22**	-.10	-.05	-.23**	-.10
3 Education				-.12	.04	-.04	-.05	-.12	-.16*	-.11	.14*	.12	.09	-.07	-.05	-.06	-.01	-.02	-.05
4 Conservatism					.43**	-.13	-.26**	.41**	.51**	.56**	.41**	.40**	.40**	.12	.07	-.01	.46**	.39**	.38**
5 Religiosity						.08	-.07	.47**	.48**	.59**	.50**	.48**	.45**	.24**	.15*	.01	.54**	.47**	.44**
6 Harm (MF)							.61**	.23**	.20**	.18**	.13	.12	.12	.42**	.29**	.25**	.16*	.06	.11
7 Fairness (MF)								.13	.03	-.06	-.09	-.03	-.03	.23**	.27**	.32**	-.11	-.07	-.08
8 Loyalty (MF)									.73**	.67**	.50**	.52**	.48**	.34**	.30**	.05	.46**	.40**	.34**
9 Authority (MF)										.75**	.48**	.47**	.46**	.35**	.29**	.10	.54**	.41**	.42**
10 Purity (MF)											.58**	.55**	.53**	.36**	.26**	.02	.69**	.56**	.54**
11 Moral outrage (drugs)												.91**	.85**	.48**	.35**	.09	.70**	.58**	.51**
12 Punitiveness (drugs)													.89**	.39**	.41**	.11	.61**	.63**	.55**
13 Criminalisation (drugs)														.31**	.29**	.14*	.58**	.49**	.55**
14 Moral outrage (harm)															.75**	.52**	.48**	.41**	.32**
15 Punitiveness (harm)																.68**	.34**	.47**	.31**
16 Criminalisation (harm)																	.11	.17*	.24**
17 Moral outrage (sexual)																		.77**	.75**
18 Punitiveness (sexual)																			.80**
19 Criminalisation (sexual)																			

\* p < .05, \*\* p < .01

# MORAL FOUNDATIONS AND CRIME

Table 11

*Summary of Hierarchical Regression Analysis for Variables Predicting Punitiveness, Moral Outrage and Support for the Criminalisation of All Offences*

	<i>Punitiveness</i>			<i>Moral outrage</i>			<i>Criminalisation</i>		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
<b>Step 1</b>									
Age	-.66	.14	-.27**	-.29	.08	-.20**	-.17	.07	-.14*
Female	2.52	3.00	.05	3.41	1.69	.11*	1.12	1.46	.05
Conservatism	3.41	.94	.23**	2.18	.53	.26**	1.70	.46	.25**
Religiosity	2.82	.47	.38**	1.82	.26	.43**	1.18	.23	.34**
Education	2.36	1.79	.08	1.55	1.00	.09	.62	.87	.04
<b>Step 2</b>									
Age	-.56	.13	-.23**	-.21	.07	-.15**	-.13	.07	-.11
Female	2.53	2.76	.05	3.42	1.49	.11*	1.14	1.38	.05
Conservatism	1.72	1.01	.12	1.06	.55	.13	1.18	.50	.17*
Religiosity	1.47	.49	.20**	.93	.26	.22**	.65	.24	.19**
Education	3.90	1.67	.13	2.57	.90	.15**	1.27	.83	.09
Individualising	.29	.17	.10	.19	.09	.11*	.19	.08	.14*
Binding	.54	.10	.39**	.36	.06	.45**	.20	.05	.32**

*Note.* For punitiveness:  $R^2 = .32^{**}$  for Step 1;  $\Delta R^2 .10^{**}$  for Step 2. For moral outrage:  $R^2 = .36^{**}$  for Step 1;  $\Delta R^2 .13^{**}$  for Step 2. For criminalisation:  $R^2 = .26^{**}$  for Step 1;  $\Delta R^2 .08^{**}$  for Step 2.

\*  $p < .05$ , \*\*  $p < .01$

# MORAL FOUNDATIONS AND CRIME

Table 12

*Summary of Hierarchical Regression Analysis for Variables Predicting Punitiveness, Moral Outrage and Support for the Criminalisation of Drug Offences*

	<i>Punitiveness</i>			<i>Moral outrage</i>			<i>Criminalisation</i>		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
<b>Step 1</b>									
Age	-.21	.07	-.18**	-.12	.04	-.18**	-.06	.04	-.09
Female	1.25	1.46	.05	.68	.78	.05	.68	.82	.05
Conservatism	1.92	.46	.27**	1.07	.24	.28**	1.05	.26	.27**
Religiosity	1.29	.23	.36**	.75	.12	.38**	.64	.13	.33**
Education	2.29	.87	.16**	1.48	.47	.18**	.96	.49	.12
<b>Step 2</b>									
Age	-.15	.07	-.12*	-.08	.04	-.13*	-.03	.04	-.04
Female	1.29	1.42	.05	.36	.75	.03	.65	.81	.05
Conservatism	1.00	.50	.14*	.47	.27	.12	.55	.29	.15
Religiosity	.62	.24	.17*	.36	.13	.18**	.29	.14	.15*
Education	2.89	.83	.20**	1.74	.44	.22**	1.27	.47	.16**
Harm (MF)	.10	.18	.04	.15	.09	.11	.06	.10	.05
Fairness (MF)	-.01	.19	-.01	-.16	.10	-.11	-.02	.11	-.02
Loyalty (MF)	.47	.16	.24**	.20	.09	.19*	.22	.09	.21*
Authority (MF)	.00	.18	.00	.01	.09	.01	.02	.10	.02
Purity (MF)	.32	.15	.21*	.21	.08	.25**	.17	.08	.21*

Note. For punitiveness:  $R^2 = .30^{**}$  for Step 1;  $\Delta R^2 .09^{**}$  for Step 2. For moral outrage:  $R^2 = .32^{**}$  for Step 1;  $\Delta R^2 .10^{**}$  for Step 2. For criminalisation:  $R^2 = .26^{**}$  for Step 1;  $\Delta R^2 .08^{**}$  for Step 2.

\*  $p < .05$ , \*\*  $p < .01$

# MORAL FOUNDATIONS AND CRIME

Table 13

*Summary of Hierarchical Regression Analysis for Variables Predicting Punitiveness, Moral Outrage and Support for the Criminalisation of Harm Offences*

	<i>Punitiveness</i>			<i>Moral outrage</i>			<i>Criminalisation</i>		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
<b>Step 1</b>									
Age	-.17	.05	-.22**	-.09	.03	-.21**	-.04	.03	-.09
Female	-1.36	1.10	-.08	.44	.64	.05	-.67	.56	-.08
Conservatism	-.01	.34	-.00	.06	.20	.02	-.07	.17	-.03
Religiosity	.37	.17	.16*	.34	.10	.25**	.02	.09	.03
Education	-.46	.66	-.05	-.28	.38	-.05	-.33	.33	-.07
<b>Step 2</b>									
Age	-.16	.05	-.20**	-.08	.03	-.18**	-.04	.03	-.11
Female	-1.27	1.07	-.08	.15	.60	.02	-.56	.55	-.07
Conservatism	-.08	.38	-.02	.02	.21	.01	.19	.20	.09
Religiosity	.04	.18	.02	.11	.10	.08	.02	.09	.02
Education	.08	.62	.01	-.00	.35	-.00	-.15	.32	-.03
Harm (MF)	.19	.13	.12	.31	.07	.33**	.09	.07	.11
Fairness (MF)	.33	.15	.19*	.04	.08	.04	.24	.07	.28**
Loyalty (MF)	.04	.12	.04	.02	.07	.03	-.10	.06	-.16
Authority (MF)	.17	.13	.14	.08	.07	.11	.11	.07	.17
Purity (MF)	.12	.11	.12	.08	.06	.13	-.04	.06	-.08

*Note.* For punitiveness:  $R^2 = .08^{**}$  for Step 1;  $\Delta R^2 .14^{**}$  for Step 2. For moral outrage:  $R^2 = .10^{**}$  for Step 1;  $\Delta R^2$

.20\*\* for Step 2. For criminalisation:  $R^2 = .02$  for Step 1;  $\Delta R^2 .13^{**}$  for Step 2.

\*  $p < .05$ , \*\*  $p < .01$

# MORAL FOUNDATIONS AND CRIME

Table 14

*Summary of Hierarchical Regression Analysis for Variables Predicting Punitiveness, Moral Outrage and Support for the Criminalisation of Sexual Offences*

	<i>Punitiveness</i>			<i>Moral outrage</i>			<i>Criminalisation</i>		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
<b>Step 1</b>									
Age	-.28	.06	-.28**	-.07	.03	-.12*	-.07	.03	-.15*
Female	2.62	1.22	.12*	2.29	.67	.19**	1.11	.63	.11
Conservatism	1.45	.38	.25**	1.06	.21	.30**	.72	.20	.24**
Religiosity	1.15	.19	.38**	.74	.11	.42**	.51	.10	.35**
Education	.52	.73	.04	.19	.32	.03	-.02	.38	-.00
<b>Step 2</b>									
Age	-.25	.06	-.24**	-.04	.03	-.07	-.06	.03	-.12*
Female	2.17	1.22	.10	1.59	.62	.13*	.61	.63	.06
Conservatism	.74	.43	.12	.40	.22	.12	.34	.22	.12
Religiosity	.70	.21	.23**	.35	.11	.20**	.29	.11	.20**
Education	.81	.71	.06	.41	.29	.07	.10	.37	.02
Harm (MF)	-.04	.15	-.02	.15	.08	.12	.08	.08	.08
Fairness (MF)	.04	.17	.02	-.12	.08	-.09	-.04	.09	-.04
Loyalty (MF)	.02	.14	.02	-.02	.07	-.02	-.08	.07	-.10
Authority (MF)	-.04	.15	-.02	.04	.08	.04	.03	.08	.04
Purity (MF)	.46	.13	.35**	.35	.06	.47**	.24	.07	.38**

*Note.* For punitiveness:  $R^2 = .34^{**}$  for Step 1;  $\Delta R^2 .06^{**}$  for Step 2. For moral outrage:  $R^2 = .40^{**}$  for Step 1;  $\Delta R^2 .14^{**}$  for Step 2. For criminalisation:  $R^2 = .27^{**}$  for Step 1;  $\Delta R^2 .08^{**}$  for Step 2.

\*  $p < .05$ , \*\*  $p < .01$

## Appendices

### Appendix A

#### Moral Foundations Questionnaire (MFQ-30)

Part 1. When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking? Please write a number from 0-5 next to each statement using this scale:

Not at all relevant	Not very relevant	Slightly relevant	Somewhat relevant	Very relevant	Extremely relevant
0	1	2	3	4	5

- \_\_\_\_\_ Whether or not someone suffered emotionally
- \_\_\_\_\_ Whether or not some people were treated differently than others
- \_\_\_\_\_ Whether or not someone's action showed love for his or her country
- \_\_\_\_\_ Whether or not someone showed a lack of respect for authority
- \_\_\_\_\_ Whether or not someone violated standards of purity and decency
- \_\_\_\_\_ Whether or not someone was good at math
- \_\_\_\_\_ Whether or not someone cared for someone weak or vulnerable
- \_\_\_\_\_ Whether or not someone acted unfairly
- \_\_\_\_\_ Whether or not someone did something to betray his or her group
- \_\_\_\_\_ Whether or not someone conformed to the traditions of society
- \_\_\_\_\_ Whether or not someone did something disgusting
- \_\_\_\_\_ Whether or not someone was cruel
- \_\_\_\_\_ Whether or not someone was denied his or her rights
- \_\_\_\_\_ Whether or not someone showed a lack of loyalty
- \_\_\_\_\_ Whether or not an action caused chaos or disorder
- \_\_\_\_\_ Whether or not someone acted in a way that God would approve of

## MORAL FOUNDATIONS AND CRIME

Part 2. Please read the following sentences and indicate your agreement or disagreement:

<b>Strongly disagree</b>	<b>Moderately disagree</b>	<b>Slightly disagree</b>	<b>Slightly agree</b>	<b>Moderately agree</b>	<b>Strongly agree</b>
0	1	2	3	4	5

\_\_\_\_\_ Compassion for those who are suffering is the most crucial virtue.

\_\_\_\_\_ When the government makes laws, the number one principle should be ensuring that everyone is treated fairly.

\_\_\_\_\_ I am proud of my country's history.

\_\_\_\_\_ Respect for authority is something all children need to learn.

\_\_\_\_\_ People should not do things that are disgusting, even if no one is harmed.

\_\_\_\_\_ It is better to do good than to do bad.

\_\_\_\_\_ One of the worst things a person could do is hurt a defenceless animal.

\_\_\_\_\_ Justice is the most important requirement for a society.

\_\_\_\_\_ People should be loyal to their family members, even when they have done something wrong.

\_\_\_\_\_ Men and women each have different roles to play in society.

\_\_\_\_\_ I would call some acts wrong on the grounds that they are unnatural.

\_\_\_\_\_ It can never be right to kill a human being.

\_\_\_\_\_ I think it's morally wrong that rich children inherit a lot of money while poor children inherit nothing.

\_\_\_\_\_ It is more important to be a team player than to express oneself.

\_\_\_\_\_ If I were a soldier and disagreed with my commanding officer's orders, I would obey anyway because that is my duty.

\_\_\_\_\_ Chastity is an important and valuable virtue.

## **Appendix B**

### **Drug and harm offending, and ‘taboo sexual’ practices vignettes**

#### **Drug Vignettes (Study 1 and 2)**

*Vignette 1.*

Bob smokes a cannabis cigarette at a party.

*Vignette 2.*

Jane sells a bag of cannabis to someone on the street for \$100.

*Vignette 3.*

Simone smokes a pipe of methamphetamine at a friend’s house.

*Vignette 4.*

Albert sells a bag of methamphetamine to someone for \$500.

#### **Harm Vignettes (Study 1 and 2)**

*Vignette 5.*

While driving 20 kilometres over the speed limit Susan fails to take a corner and hits another car, killing the other driver.

*Vignette 6.*

During a disagreement with an acquaintance, James punches him in the face.

*Vignette 7.*

Rebecca threatens to assault a co-worker during an argument at work.

*Vignette 8.*

Leo holds a knife to someone on the street and asks them to hand over their wallet and mobile phone.

#### **‘Taboo’ Sexual Practice Vignettes (Study 2)**

*Vignette 9.*



## MORAL FOUNDATIONS AND CRIME

Jenny sunbathes completely nude on her front lawn in clear view of anyone who passes her house.

*Vignette 10.*

Peter has consensual sex with another man.

*Vignette 11.*

Jerry (aged 30) and his sister Jade (32) have consensual sex with each other.

*Vignette 12.*

Brian masturbates in a public park during the afternoon in clear view of anyone who passes by.

## Appendix C

## Vignette response questions

Q1) How morally outraged were you by this action?

<b>Not at all</b>	<b>Slightly</b>	<b>Somewhat</b>	<b>Moderately</b>	<b>Quite</b>	<b>Very</b>	<b>Extremely</b>
1	2	3	4	5	6	7

Q2) How much do you think that this individual should be punished for this action?

<b>Not at all</b>	<b>Slightly</b>	<b>Somewhat</b>	<b>Moderately</b>	<b>Quite</b>	<b>Very</b>	<b>Extremely</b>
1	2	3	4	5	6	7

Q3) To what extent do you agree that this individual should be sent to prison for their action?

<b>Strongly disagree</b>	<b>Moderately disagree</b>	<b>Slightly disagree</b>	<b>Neither agree nor disagree</b>	<b>Slightly agree</b>	<b>Moderately agree</b>	<b>Strongly Agree</b>
1	2	3	4	5	6	7

Q4) To what extent do you agree that these sorts of acts should be against the law and subject to punishment by the state? (Study 2 only)

<b>Strongly disagree</b>	<b>Moderately disagree</b>	<b>Slightly disagree</b>	<b>Neither agree nor disagree</b>	<b>Slightly agree</b>	<b>Moderately agree</b>	<b>Strongly Agree</b>
1	2	3	4	5	6	7

## Appendix D

### Recruitment blurb



My name is Campbell Fargher and I am a master's Student in Criminology at Victoria University of Wellington. This research project is work towards my CRIM 591 thesis. This primary aim of this project is to improve our understanding about the various factors that influence attitudes towards drug offenders in comparison to other kinds of offenders.

I am looking for anyone aged 18 or over who would like to participate by completing a short online questionnaire This should take no longer than 10 minutes. Your responses will be completely anonymous and no identifying information will be requested. This research has been approved by the Victoria University of Wellington Human Ethics Committee (Approval No. 26068).

If you are interested, please fill out the short questionnaire at: [questionnaire link].

If you would like any further information about this research do not hesitate to contact either myself at [fargheca@staff.vuw.ac.nz](mailto:fargheca@staff.vuw.ac.nz) or my supervisor, Dr Russil Durrant ([Russil.durrant@vuw.ac.nz](mailto:Russil.durrant@vuw.ac.nz)).

Thank you for considering this request.

## **Appendix E**

### **Study 1 information sheet**



Thank you for your interest in this project. Please read this information before deciding whether or not to take part. If you decide to participate, thank you. If you decide not to take part, thank you for considering my request.

#### **Who am I?**

My name is Campbell Fargher and I am a master's Student in Criminology at Victoria University of Wellington. This research project is working towards my CRIM 591 thesis.

#### **What is the aim of the project?**

This primary aim of this project is to improve our understanding about the various factors that influence attitudes towards drug offenders in comparison to other kinds of offenders. This research has been approved by the Victoria University of Wellington Human Ethics Committee (Approval No. 0000026068).

#### **How can you help?**

If you agree to take part, you will complete the questionnaire online. In addition to providing demographic information you will also be asked about your attitudes towards a number of specific instances of behaviour including the use and sale of drugs, and the infliction of harm on others. You will then be asked to respond to questions that will ask you about your moral beliefs regarding various kinds of behaviour. It is possible that some people may find these questions upsetting or disturbing. Altogether the questionnaire should take around fifteen minutes to complete. You can stop the questionnaire at any time, without giving a reason, and the data will not contribute towards the final research. However, once you have completed and submitted the questionnaire, the information you have provided will not be able to be withdrawn. Completion of the survey is taken as consent to your participation. Participants will not be able to review their responses after they have submitted them. The contact details of the supervisor will be provided, and participants will be encouraged to email the supervisor to obtain a summary of the results of the research once it has been completed.

#### **What will happen to the information you give?**

## MORAL FOUNDATIONS AND CRIME

This research is anonymous. This means that nobody, including the researchers will be aware of your identity. By answering it, you are giving consent for us to use your responses in this research. Your answers will remain completely anonymous and unidentifiable. Once you submit the survey, it will be impossible to retract your answer. Please do not include any personal identifiable information in your responses

### **What will the project produce?**

The information from my research will be used in my master's thesis. The results of the study may also be presented at conferences and submitted for publication in peer reviewed journals.

### **If you accept this invitation, what are your rights as a research participant?**

You do not have to accept this invitation if you don't want to. If you do decide to participate, you have the right to:

- withdraw from the study by not completing the questionnaire;
- be able to read any reports of this research by emailing the researcher to request a copy.

### **If you have any questions or problems, who can you contact?**

If you have any questions, either now or in the future, please feel free to contact either:

#### **Student:**

Name: Campbell Fargher

University email address:  
campbell.fargher@vuw.ac.nz

#### **Supervisor:**

Name: Russil Durrant

Role: Senior Lecturer, Institute of  
Criminology

School: Social and Cultural Studies

Phone: 04 4639980

russil.durrant@vuw.ac.nz

### **Human Ethics Committee information**

If you have any concerns about the ethical conduct of the research, you may contact the Victoria University HEC Convener: Dr Judith Loveridge. Email [hec@vuw.ac.nz](mailto:hec@vuw.ac.nz) or telephone (04) 4636028

## **Appendix F**

### **Study 2 information sheet**



Thank you for your interest in this project. Please read this information before deciding whether or not to take part. If you decide to participate, thank you. If you decide not to take part, thank you for considering my request.

#### **Who am I?**

My name is Campbell Fargher and I am a master's Student in Criminology at Victoria University of Wellington. This research project is working towards my CRIM 591 thesis.

#### **What is the aim of the project?**

This primary aim of this project is to improve our understanding about the various factors that influence attitudes towards drug offenders in comparison to other kinds of offenders. This research has been approved by the Victoria University of Wellington Human Ethics Committee (Approval No. 0000026068).

#### **How can you help?**

If you agree to take part, you will complete the questionnaire online. In addition to providing demographic information you will also be asked about your attitudes towards a number of specific instances of behaviour including the use and sale of drugs, the infliction of harm on others, and different types of sexual behaviour. It is possible that some people may find these questions upsetting or disturbing. You will then be asked to respond to a number of questions that will ask you about your moral beliefs regarding various kinds of behaviour. Altogether the questionnaire should take around fifteen minutes to complete. You can stop the questionnaire at any time, without giving a reason, and the data will not contribute towards the final research. However, once you have completed and submitted the questionnaire, the information you have provided will not be able to be withdrawn. Completion of the survey is taken as consent to your participation. Participants will not be able to review their responses after they have submitted them. The contact details of the supervisor will be provided, and participants will be encouraged to email the supervisor to obtain a summary of the results of the research once it has been completed.

#### **What will happen to the information you give?**

## MORAL FOUNDATIONS AND CRIME

This research is anonymous. This means that nobody, including the researchers will be aware of your identity. By answering it, you are giving consent for us to use your responses in this research. Your answers will remain completely anonymous and unidentifiable. Once you submit the survey, it will be impossible to retract your answer. Please do not include any personal identifiable information in your responses

### **What will the project produce?**

The information from my research will be used in my master's thesis. The results of the study may also be presented at conferences and submitted for publication in peer reviewed journals.

### **If you accept this invitation, what are your rights as a research participant?**

You do not have to accept this invitation if you don't want to. If you do decide to participate, you have the right to:

- withdraw from the study by not completing the questionnaire;
- be able to read any reports of this research by emailing the researcher to request a copy.

### **If you have any questions or problems, who can you contact?**

If you have any questions, either now or in the future, please feel free to contact either:

#### **Student:**

Name: Campbell Fargher

University email address:  
campbell.fargher@vuw.ac.nz

#### **Supervisor:**

Name: Russil Durrant

Role: Senior Lecturer, Institute of  
Criminology

School: Social and Cultural Studies

Phone: 04 4639980

russil.durrant@vuw.ac.nz

### **Human Ethics Committee information**

If you have any concerns about the ethical conduct of the research, you may contact the Victoria University HEC Convener: Dr Judith Loveridge. Email [hec@vuw.ac.nz](mailto:hec@vuw.ac.nz) or telephone (04) 4636028

**Appendix G**

**Debriefing statement**

Thank you for your participation in this study. The aim of this study is to improve our understanding about the various factors that influence attitudes towards drug offenders in comparison to other kinds of offenders.

If any of the material presented in this questionnaire has generated concerns for you, please contact a relevant health professional or counsellor. Counselling appointments for Victoria University of Wellington students can be made by visiting the Mauri Ora reception, or via phone on +64 4 463 5310. For urgent mental health support call Crisis Resolution Service (CRS) on 0800 745 477.

If you have any questions, or wish to receive a summary of the results, please contact:

Campbell Fargher, Principal Investigator, [campbell.fargher@vuw.ac.nz](mailto:campbell.fargher@vuw.ac.nz)

OR

Russil Durrant, Supervisor, [russil.durrant@vuw.ac.nz](mailto:russil.durrant@vuw.ac.nz)