Chapter 1

Introduction to Kohlbergian Moral Reasoning and the Liberalism-Conservatism Dimension

1.1 Introduction

The purpose of Chapter 1 is to explore the theoretical background of Kohlbergian moral reasoning and liberalism-conservatism. Kohlbergian moral reasoning will be introduced via a brief historical overview of psychological investigation into morality. Problems and refinements to Kohlberg’s theory will also be considered. Additionally, the liberalism-conservatism dimension will be described, both in terms of political theory and psychological research.

1.2 The Psychology of Morality

Morality asserts that our potential actions can be evaluated in terms of goodness/badness or rightness/wrongness to some extent. Moreover, as a result of performing a series of these “good” or “bad” actions, we can be judged as good or bad people. Morality is, of course, about what makes these actions good or bad.

It has been philosophers (e.g., Plato, trans. 1945; Aristotle, trans. 1975; Hobbes, 1651/1948; Rousseau, 1762/1973; Kant, 1785/1993; Bentham, 1789/1948; Mill 1863/1998) who have written the most on the issue and, despite the inquiries of many eminent minds, there is still great disagreement amongst modern philosophers over what
makes an action right or wrong at even the broadest levels of inquiry. This disparity of opinions about the nature of morality is not, of course, limited to philosophers.

The psychology of morality perhaps begins when one attempts to investigate these differences rather than overcome them. Hence, on the issue of morality, psychology can be said to take more of a descriptive than a normative approach when compared with philosophy\(^1\). To a psychologist, morality is essentially the collection of psychological phenomena such as behaviours, thoughts and emotions that an individual has towards goodness/badness or rightness/wrongness. That is not to say that psychologists don’t have their own “philosophic conceptions” of morality – it is merely the psychological method and what it is trying to achieve that results in this apparent subjectivity.

Early psychological research tended to examine moral character and typically searched for causal factors with a view towards moral education. In a very influential study, Hartshorne and May (1928) measured children of a range of variables, such as age, intelligence and socio-economic variables, and then placed them in situations where they could lie, cheat or steal. While they found certain general trends, such as low IQ or emotional instability being associated with deceit, they concluded that deceit was not a character trait but merely “specific functions of life situations” (Hartshorne & May, 1928, p. 411). After performing further work examining other character variables such as self-control, Hartshorne, May and Shuttleworth (1930) concluded that children viewed

\(^1\) It is not, however, being suggested that all philosophic approaches are strictly normative nor is it being suggested that all psychological approaches are strictly descriptive.
apparently related situations (e.g., different situations involving honesty) as distinct – there was no global sense of moral character that was developing. Eysenck (1953) remarked that while Hartshorne and May’s results allowed for some non-specificity, their studies effectively undermined the idea of global moral character.

The failure of such studies to identify a developing moral character left researchers with two options. Either they could abandon their studies of morality and accept that it just did not develop in youth – a decidedly unpopular view amongst governments, educationalists, etc. - or they could abandon moral character per se and find another aspect of morality that developed. Piaget (1932/1968) was the next researcher to address the issue of morality in children but, rather than examining moral character, attempted to understand children’s moral judgement. However, behaviourism, with its focus on action rather than thought, was in the ascendency in the English-speaking world and it was not until the cognitive revolution (in the 1950’s and 60’s) that researchers, concerned with how people justify their actions, began to follow Piaget’s lead.

1.3 Moral Judgement as a Component of Morality

While this thesis is primarily concerned with moral judgements per se, it must always be remembered that they are only one constituent of morality. The field of morality can be partitioned in several ways but in each case moral judgement (aka moral reasoning) plays an important role. Rest (1984) notes that, amongst psychologists, the area is often divided into behaviour, affect and cognition (with moral judgement obviously falling under cognition) but he argues that this view is inadequate. While an evaluation of the best way to partition the concept of morality is beyond the scope of this
thesis, a brief analysis of two such models suggests that moral judgement appears to be an essential component of morality.

Hogan (1973) offers a five-factor model of morality. Hogan’s factors are moral knowledge – the knowledge one has about society’s moral rules; socialisation – the degree to which these rules have been internalised; empathy – the degree to which we are conscious of how our actions affect others; the ethics of conscience and the ethics of responsibility – two different systems of making moral judgements (see also Hogan, 1970); and autonomy – the degree to which individuals establish their own moral code as opposed to merely inheriting one from society (Hogan, 1973).

By contrast, Rest (1983) offers a four-component model of morality. The first component, moral sensitivity, involves appreciating the possible moral implications of a given course of action. The second component, moral judgement, is discussed below. Moral motivation, the third component, involves deciding which course of action to perform – i.e., to what extent moral v non-moral factors influence one’s choice of action. Finally, what Rest calls moral character involves performing one’s chosen course of action despite the presence of obstacles and other expected or unexpected difficulties (Rest, 1983).

As an aside, such analyses reveal that Hartshorne and May (1928; Hartshorne et al., 1930) struggled to find any global moral character because they ignored the underlying processes that lead to children’s actions. Using Rest’s (1983) system, we observe that Hartshorne and May were examining the fourth component directly and exclusively. If the children they studied had deficiencies in the other three components (e.g., extracting moral information from the situation or judging the right course of
action) then it would be rather difficult for them to perform this “right action” regardless of how “moral” they were. Therefore Hartshorne and May’s (1928; Hartshorne et al., 1930) pre-conception of what drove moral behaviour apparently relied on an overly simplistic understanding of how the components of morality interacted.

Regardless, both Hogan’s (1973) and Rest’s (1984) subdivisions of morality reserve a place for moral judgement. Indeed, given that morality involves the “goodness” and “badness” of actions, it would seem quite difficult (if not impossible) to devise a system of morality that did not allow for this “goodness” or “badness” to be evaluated. This is, of course, the function of moral judgement.

As previously mentioned, the moral judgement component of morality has, perhaps, received the most attention amongst psychological researchers. Piaget (1932/1968) began his research in moral judgement by studying children’s beliefs about rules. Originally, he was interested in how children of different ages treat the rules of the games they play. Piaget noted that children progressed from having no real conception of rules through viewing them as being inviolable to viewing them as changeable provided a majority (of the game players) agreed that it was in their best interests.

Piaget wondered, especially considering that many children who viewed the rules as inviolable attached moral force to them, if children displayed similar attitudes to moral rules. He presented children with two stories. These stories differed in features such as the intention and consequence of acts – e.g., a child who broke one glass trying to steal some jam compared to a child who accidentally broke 15 cups while attempting to obey a parental request. Piaget then asked the children several questions about “naughtiness”
and punishment in order to determine which action the child viewed as most immoral and why this was the case.

Piaget used similar techniques to investigate other moral questions such as how children determine appropriate punishments for transgressions. He observed that the children’s conceptions of moral rules were similar to their conception of their games’ rules. Furthermore, he argued that moral maturity involved both respect for rules and a sense of social justice. He theorised that children progress from a pre-moral period - where they have no real concerns for rules of conduct, via a stage of heteronomous morality - where rules from authority figures are absolute, to a stage of autonomous morality - where rules are arbitrary agreements that can be changed (Piaget, 1932/1968).

Kohlberg (e.g., 1963, 1981 1984, Colby & Kohlberg, 1987) continued Piaget’s tradition of analysing moral judgement within a cognitive developmental framework. Kohlberg expanded Piaget’s conception of the stages of moral reasoning and the age range associated with moral development. Moreover, although he continued to utilise moral dilemmas, Kohlberg’s methodology expanded Piaget’s. Kohlberg was a great believer in Socratic methods of teaching and understanding. Thus, the best way to investigate people’s moral judgement was to question them about the features of their moral philosophy – to probe them so as to determine the key features of their viewpoints.

1.4 Kohlberg’s Theory of Moral Reasoning

This belief in Socratic methods led Kohlberg to be more concerned with the general belief structures underlying moral reasoning rather than how moral reasoning varied from situation to situation. As a result, Kohlberg, unlike Piaget, did not vary
intention and consequence but merely presented individuals with a choice of two possible actions. One of these actions involved obeying authority while the other involved breaking it to serve some human need. While participants indicated which choice was morally correct, this was not the variable of interest. Instead, Kohlberg probed them on the justification of their decisions - i.e., the different considerations used when morally evaluating a given action. It is important to note that this represents a subtle but critical shift in the research focus. Whereas Piaget’s (1932/1968) primary focus was the moral judgement that was made, Kohlberg’s (e.g., 1963, 1984) primary focus was on the reasoning behind that decision. Moral judgements are simply decisions reached as whether to something is “good” or “bad”. Moral reasoning is the underlying reasons behind these judgements.

Kohlberg (e.g., 1969, 1976) claimed that an individual’s moral reasoning could be categorised into one of three levels. Each moral reasoning level utilised markedly different moral reasoning criteria. In the preconventional level (the first level), instrumental considerations, such as being rewarded or not being punished, determine the rightness or otherwise of an action. This level is referred to as preconventional because it represents moral judgements that ignore or preclude consideration of society’s social or legal rules and standards (i.e., conventions). Kohlberg’s second level was the conventional level where morality is based in these aforementioned social/legal standards. Kohlberg’s third (and “highest”) level is called the postconventional level because morality is determined by rules and principles that transcend society’s conventions and can independently evaluate these. Kohlberg (e.g., Colby, Kohlberg, Gibbs & Lieberman, 1983) held that, unless they were in transition, individuals would
utilise one and only one of the levels of reasoning across all moral situations. He also viewed the sequence as universal and invariant though he acknowledged that not everyone progressed to the postconventional level.

According to Kohlberg (e.g., 1963), each level can be divided into two stages making a total of six stages. These stages more precisely specified the type of moral reasoning employed. Stages 1 and 2 arose from the preconventional level. The earliest stage of development (stage 1) encapsulates a highly egocentric view of morality. The individual is concerned with the physical consequences of an act. Thus, injury or property damage are considered to be immoral regardless of intention. Similarly, the individual strives to avoid punishment because the resultant negative physical consequences would make the punished act immoral. In order to avoid such punishment, blind obedience to authority is a feature of this stage. In contrast to stage 4, it is only the power of the authorities to punish that compels obedience – there is nothing immoral about violating the rules of a toothless authority.

Stage 2 morality arrives with the recognition that other people have their own interests which may clash with yours. The stage 2 individual is still self-interested but appreciates that others’ wishes have to be considered in order to achieve one’s own. Thus, people should strive to make “equal” deals because both sides exercise their own interest to some extent. However, obedience to rules/authority is only necessary if it aids one’s interest. There is no sense of working towards collective goals – just self-interested individuals interacting with each other.

Stages 3 and 4 are finer distinctions of conventional reasoning. At stage 3, the individual becomes concerned with the opinions of others. One seeks social approval of
one’s actions. Moreover, the conception of roles and relationships is understood. The
individual is a mother, daughter, friend, employee etc. and each of these roles requires
acting in a certain way towards the other individuals in question. Properly fulfilling these
roles and living up to social standards such as loyalty and trust-keeping results in others
evaluating the stage 3 individual as a moral individual – an evaluation which is taken on
board.

Stage 4 individuals understand that they are merely members in a society. A
society has its own goals that differ from the individual’s goals. Furthermore, following
rules and fulfilling roles aids society because these have been established by society or
rather its social authorities. Because the stage 4 individual has difficulty making this
distinction between society and its social authorities, governments, clergy, etc. are to be
obeyed as if society itself was issuing their positions.

Stages 5 and 6, which together form the postconventional level, base morality in
broad principles of justice. Stage 5 approximately mimics social contract theory (e.g.,
Rousseau, 1762/1973). Morality is concerned with the interaction of individuals’ rights.
Laws exist to aid a society but these can be challenged if they hinder one’s rights or
dignity. Democracy, with its basis on what is good for the majority, utilises stage 5
reasoning.

Stage 6 morality is based on individual, universal principles of conscience. These
principles transcend any law or social contract. Heavily influenced by the philosophy of
Rawls (1971), Kohlberg (1981) described stage 6 reasoning as moral musical chairs,
where a person takes the perspective of everyone that can be affected by a given moral
decision and examines the consequences for them before making a decision.
1.5 Criticisms of Kohlberg’s Theory of Moral Reasoning

Among the many criticisms, there have been four main criticisms of Kohlberg’s theory of moral reasoning that are relevant to the present thesis. There are several other criticisms of Kohlberg such as criticism of his emphasis on justice (e.g., Gilligan, 1982) and claims that he underestimated the moral capacities of young children (e.g., Zahn-Waxler, Radke-Yarrow, Wagner & Chapman, 1992). The aim of this section is not to review all of these criticisms but to review those that attack some of the fundamental features of Kohlberg’s theory and thus necessitate a significant reworking of Kohlberg’s theory and experimental paradigm.

The first major problem is the scarcity of postconventional reasoning, especially stage 6 (Gibbs, 1979; Snarey, 1985). Indeed, Kohlberg (1978) conceded that no individuals consistently reason at stage 6 and the revised scoring manual of his Moral Judgement Interview (MJI) (Colby et al., 1987) only scores stages 1 to 5. However, Kohlberg, Boyd and Levine (1990) reintroduced stage 6 although they redefined it as having respect for people.

Second, Kohlberg’s use of "hard stages" has come under attack. Findings from the area of cognitive development suggest that people use different “stages” at the same time – perhaps even on the same issue. Siegler (1997) notes that in all areas of cognitive development, children utilise multifaceted approaches and development change is characterised by changes in the frequency of their use as well as the development of new approaches. Rest, Narvaez, Bebeau & Thoma (1999a) observe that even neo-Piagetians such as Lourenco and Machado (1996) are divorcing themselves from global, static stages (Rest et al., 1999a). A key point here is that, according to Kohlberg’ theory, moral
reasoning, above all, develops as a function of cognitive development. Because of this, any cognitive structures postulated by Kohlberg (such as moral reasoning stages) need to be consistent with what is known about cognitive development. However, as noted above, modern cognitive development researchers (e.g., Siegler, 1997) do not believe that our cognitive development is as rigid as Kohlberg’s hard stages suggest it would be. Kohlberg’s suggestion that moral reasoning is a process of cognitive development that develops via hard stages thus seems incongruous as well as inconsistent with the data.

Third, Kohlberg’s use of interview data most probably resulted in subjective scoring. Kohlberg assumed that participants were able to report their reasoning accurately and that the interviewer's judgement was impartial. Both claims now seem dubious. Firstly, a review across several areas by Nisbett and Wilson (1977) concluded that subjective reports are poor attempts to understand underlying mental processes. On the second issue, Rest et al. (1999a) observe that experimenter bias seems to occur with such interview data and they mention the usage of quotes by Gilligan (1982) and Kohlberg et al. (1990) to bolster theoretical claims. Rest et al. (1999a) do not appear to give specific examples but these are not difficult to obtain. For instance, Gilligan (1982), in Chapter 2, discusses the contrast in moral reasoning between two 11-year-old children, Jake and Amy. Gilligan (1982) analyses Jake’s moral reasoning and then accepts Jake’s own description of his moral reasoning as “sort of like a math problem with humans” (p. 26). Gilligan (1982) then quotes Amy’s moral reasoning and concludes that it is “a narrative of relationships that extends over time” (p. 28). However, Jake makes comments such as “Because the druggist can get a thousand dollars later from rich people with cancer, but Heinz can’t get his wife again.” (Gilligan, 1982, p. 26). Clearly,
Jake is considering long-term relationship issues. Likewise, Amy makes comments such as “If he stole the drug, he might save his wife then, but if he did, he might have to go to jail, and then his wife might get sicker again, and he couldn’t get more of the drug, and it might not be good.” (Gilligan, 1982, p. 28). This could reasonably be interpreted as logical-mathematical reasoning about human lives. Thus, Gilligan (1982) appears, to some extent, to be extracting only the information that she finds theoretically consistent. This, however, is a potential issue for not only Gilligan but any potential interview approach (including Kohlberg’s); there is always too much room for subjective interpretation.

Finally, and perhaps most seriously, there are problems with Kohlberg’s idea of universal advance in moral reasoning. Demographic studies across many cultures (see Colby & Kohlberg, 1987 for a review) and a 20-year longitudinal study (Colby et al., 1983) suggest that, on the average, people progress through Kohlberg’s stages in order (putting aside any criticism of classifying people into a stage). However, Gibbs, Basinger and Fuller (1992) remark that 20% of participants would have experienced stage regressions from high school to university had Kohlberg not, post-hoc, reclassified certain forms of moral-relativistic thoughts as stage 4 1/2 instead of stage 2 (in Kohlberg, 1973) and reinterpreted apparently postconventional responses in high school as conventional. In other words, Kohlberg’s findings of fixed, universal stage progression were due to dubious, perhaps hopeful, interpretations.
1.6 The Defining Issues Test and Other Neo-Kohlbergian Instruments of Moral Reasoning

Despite these criticisms, many researchers accept that Kohlberg's endeavour has merit and other researchers have attempted to examine moral judgements using neo-Kohlbergian instruments. The aim of this section is not to critically evaluate all of these instruments. Instead, this section aims to explain why the DIT is the neo-Kohlbergian instrument of choice for this thesis.

Miller (1987) evaluated several neo-Kohlbergian instruments and concluded that two main alternatives to the Moral Judgement Interview (MJI) existed. These were the Defining Issues Test (DIT; Rest, Cooper, Coder, Masanz & Anderson, 1974) and the Sociomoral Reflection Measure (SRM; Gibbs, Widaman & Colby, 1982), which was later revised and shortened (SRM-SF; Gibbs et al., 1992). Recently, Lind's Moral Judgement Test (MJT; see Lind, Hartmann & Wakenhut, 1985) has also gained popularity.

The SRM (and SRM-SF) are written tasks. The SRM utilises Kohlbergian dilemmas while the SRM-SF asks questions such as "In general, how important is it for people to tell the truth?". Respondents are required to accompany their responses with reasoning. The scoring system utilising a four-stage neo-Kohlbergian model (Gibbs et al., 1992) and both tests exhibit good reliability and validity (Gibbs & Widaman, 1982; Gibbs et al., 1982, 1992). However, the scoring of responses requires a subjective evaluation of participant reasoning and results in a hard stage classification. Thus, the SRM fails to remedy pertinent weaknesses in Kohlberg’s work namely the adoption of hard stages and the employment of an interview-based methodology.
Both the MJT and DIT overcome these issues by being recognition tasks. Participants are presented with Kohlbergian-style dilemmas and, for each dilemma, given 12 items. Whilst the composition of these items differs slightly, the real dividing issue is how the “theoretically critical” score is calculated. The DIT examines stage-preference – i.e., how relatively often the reasoning of different stages are considered important (i.e., preferred). The most important score calculated is the p score, which measures preference for postconventional items.

The MJT examines stage consistency – how consistently respondents reason at a given stage. The main score of interest is the c score, which is obtained by an ANOVA procedure on the ratings. Lind (1995) argues that the c score measures moral cognition, whereas stage preference scores only measure moral affect and the examination of stage consistency is what differentiates the MJT from other moral reasoning instruments (Lind, 1995). Rest, Thoma and Edwards (1997a) decided to examine the stage preference versus stage consistency issue by constructing a c score from the DIT and found that the p score had showed greater construct validity as a developmental measure of moral reasoning. No other studies appear to have examined this issue.

However, before it can be endorsed as the measure of choice for studying Kohlbergian moral reasoning, the DIT needs to be more closely examined. DIT items were developed from responses given in Kohlbergian interviews (see Rest et al., 1974) though we cannot be sure how valid a sample of responses this is because of the issue of experimenter bias discussed in Section 1.7. Items cover stages 2 to 6 though there are proportionally higher numbers of stage 3-5 items. There are also anti-authoritarian (a) items and, for the purpose of a consistency check, meaningless (m) items. The
importance of each item is rated on a five-point scale and rankings given for the four most important items. Numerous scores can be calculated but the aforementioned p score is the most widely used. Importantly, this index reveals greater use of postconventional reasoning than the MJI, suggesting that people may implicitly utilise stage 5-6 reasoning even if they cannot verbalise it.

In terms of research applicability, the DIT has some limitations. Firstly, it requires a reading age of at least 12 years making it unsuitable for studying moral development in pre-adolescents. Secondly, there is a potential issue with item balance. Rest and his colleagues group the test into three sets of items – stages 2-3, stage 4 and stages 5-6 and yet don’t have equal numbers of these items (though the differences are small – 22, 19 and 21 respectively). Thirdly, the test ignores stage 1 reasoning. Fourthly, each dilemma does not have the same number of items of each type - i.e., stages 2-6 or A and M items (see Table 1.1). This unbalances (i.e., favours certain dilemmas over others) the test and is most problematic for scores (e.g., A, M, 6, 5b) where there are fewer items.

Reliability and validity information about the DIT is available from several sources (e.g., Rest, 1979, 1986; Rest et al., 1974, 1999a). Rest et al. (1999a) comment that the internal consistency of the p score (for composite samples) is in the mid to high 0.70s. Likewise Davidson (1979) has observed test-retest correlations (over several studies) in the 0.70s. Rest et al. (1999a) argue that the DIT satisfies 6 different criteria that would be expected of a developmentally based moral reasoning instrument. These criteria are that p scores discriminate between groups of varying expertise (e.g., Gielen & Markoulis, 1994), that p scores show longitudinal upward trends (e.g., McNeel, 1994),
Table 1.1

*Number of Items of Each Stage/Type for Each DIT Dilemma*

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<thead>
<tr>
<th>Item Type</th>
<th>Heinz</th>
<th>Students</th>
<th>Prisoner</th>
<th>Doctor</th>
<th>Webster</th>
<th>Newspaper</th>
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<td>2</td>
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<td>5a</td>
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<td>5b</td>
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<td>M</td>
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that p scores increase following moral education interventions (e.g., Schlaefli, Rest & Thoma, 1985), that individuals with high p scores demonstrate greater ability in related tasks such as recall and reconstruction of moral arguments (e.g., Narvaez, 1998), that p scores are associated with related behavioural concepts such as community involvement (e.g., Thoma, Rest & Barnett, 1986) and that it is linked to political attitudes (discussed at length in Chapter 2).

There are, however, two claims that, while the DIT appears to measure moral reasoning development, it actually is measuring something else. These claims do not refute the validity evidence alluded to above. Rather they argue that what is causing p scores is actually another variable from which moral reasoning cannot be separated.

One claim, which is discussed in depth further in this thesis, is that an individual’s moral reasoning is merely a proxy for their political liberalism-conservatism. The other claim is that moral reasoning is reducible to verbal ability (Lykken, 1991; Sanders, Lubinski & Benbow, 1995). Sanders et al. (1995) make the verbal ability claim on the basis that DIT scores fail to correlate with certain personality attributes and values after scores of verbal intelligence had been partialled out. However, several important DIT findings may argue against this (Thoma, Narvaez, Rest & Derryberry, 1999). One example is McNeel’s (1994) observation that the effect size for increased p scores over a university education is 0.80. This is considerably larger than the equivalent effect sizes for general verbal ability (0.56) and written ability (0.50) (cf Pascarella & Terenzini, 1991).

Overall, while the DIT is not the ideal instrument to study moral reasoning and some questions about its validity have not been completely dealt with, it still appears to
be one of the most useful instruments to examine the moral reasoning of adolescents and adults along Kohlbergian lines.

1.7 Liberalism and Conservatism

Politics spans similar terrain to morality but adopts a different approach. While morality comments on various issues, politics involves the implementation of (or the planned implementation of) policies related to these issues. Moral considerations can certainly influence whether a given policy is implemented or not. For instance, whether or not to take a country to war is going to be affected by many potential moral considerations such as how many lives the war will cost, what good will come from the war and so on. However, there can be (and often are) other, possibly more important considerations that are involved. Indeed, one can make political decisions where morality does not even enter into consideration. For instance, a politician may choose to vote against a proposal because his/her constituents would not re-elect him/her (regardless of the “goodness” of the proposal). And yet, morality and politics seem inexplicably linked. For instance, Machiavelli’s (1513/1947) governance system can be considered both a political and a moral system.

Historically, it has become accepted that the left/right wing dimension is the most critical aspect of a person’s political attitudes. Scott (1997) comments that this distinction is believed to have arisen during the French Revolution where the right side of the assembly hall was occupied by relatively conservative delegates and the left side by relatively liberal delegates (Scott, 1997). Obviously, though, such a description is meaningless without an understanding of what liberalism and conservatism are.
The fundamental tenet of the philosophy of liberalism is the belief that liberty should not be infringed upon without good cause (Cranston, 1967; Gaus, 1996, 2000). What constitutes good cause is an issue of division amongst liberals and determines the relative radicalness of liberals. Regardless, the tenet predicts many politically liberal positions such as homosexual rights, opposition to the death penalty and abortion rights.

In a major review of conservatism, Jost, Glaser, Kruglanski and Sulloway (2003), comment that, from the political perspective, there are two “core” aspects. The first is that conservatives are resistant to change. The second is that of conservatives are more accepting of inequality. Jost et al. (2003) acknowledge that these are often linked but that they are clearly distinguished in cases such as right wing revolutionaries (e.g., Hitler, Pinochet) and rigid left wing ideologues (e.g., Stalin, Castro). However, Muller (2001) comments that, for most individuals these two core aspects are linked although, as noted by Jost et al. (2003), this may be due to political theorists failing to adequately sample individuals in societies where these are not linked.

However, the theoretical framework above misses an important distinction. Modern political liberalism is not the same as that espoused by classical liberal philosophers (aka early liberalism, nineteenth century liberalism; e.g., Mill, 1859/1991). Classical liberalism believed in a small government that supported free market, and even laissez faire, approaches to economic policy (Heywood, 1994; Scott, 1997; Tansey, 1995). Nevertheless, in recent times, we would tend to associate such thinking as neo-conservative (Scott, 1997) or new right thinking (Heywood, 1994).

This brings us back to the question of what politically liberal and conservative viewpoints represent. Generally modern conservatism (aka neo-conservatism, new right)
tends to support (classical) liberal economic policies\(^2\) along with (classical) conservative social policies (Heywood, 1994; Scott, 1997; Tansey, 1995). Likewise, Heywood (1994) comments that, in response to the apparent failure of industrial capitalism to create “a level playing field allowing each to prosper according to his or her talents” (p. 9), political liberals typically now endorse interventionist governments that attempt to implement policies such as equality of opportunity and social justice (Heywood, 1994). Thus the modern political understanding of liberalism is of a political approach designed to increase exercise of social liberties (including class mobility) at the cost of economic freedom and increased government intervention. Thus, the framework outlined in the previous section above is useable provided that the focus is on social liberties. It is perhaps ironic that economic ideas traditionally considered to be anti-liberal are used for this purpose.

Of course, there is also an assumption that the approximate equivalence of liberals and conservative (as redefined in this section) to left and right wing hold at the extreme ends of the political spectrum. This does not seem to be the case. An individual can be to the political left of liberalism – e.g., socialism, communism\(^3\) – or to the political right of conservatism – e.g., reactionism, fascism (Heywood, 1994; Scott, 1997; Tansey, ________________

\(^2\) Indeed, the economic policies espoused by many conservative parties are often referred to as neo-liberal. This leads to the potentially confusing observation that neo-liberalism is a part of neo-conservative ideology.

\(^3\) Sometimes radicalism is also considered to the left of liberalism. However, fascism is sometimes viewed as a movement of the radical right. The term “radicalism” has been omitted for fear of confusion regarding the meaning of “radical”.
While this limitation is acknowledged, we must remember that most individuals are somewhat moderate and thus will fall into the liberal-conservative (as redefined) approximation to the left-right continuum. Thus, while such an approach may not always be perfectly correct, liberal and conservative will be used interchangeably with left and right in the thesis. This continues the approach adopted by several moral reasoning researchers (e.g., Emler, Palmer-Canton & St James, 1998; Barnett, Evens & Rest, 1995).

What has been outlined above is a political scientist’s analysis of liberalism-conservatism. Psychologists, by contrast, have taken a different tack. For at least 50 years, there has been a psychological tradition of examining conservatism from a personality/individual differences perspective (Jost et al., 2003). These theories consider conservatism to be a collection of personality traits and liberalism to be the absence of conservatism. Two of the more influential conceptions are those of Wilson (e.g., Wilson, 1973; Wilson & Patterson, 1968) and Altemeyer (e.g., Altemeyer, 1981, 1996). It must, of course, be noted that many conservatives show only some of these traits although more conservative people tend to exhibit a larger number of them.

For instance, Wilson (1973) lists the traits of the "ideal conservative" (p. 5) as religious fundamentalism, pro-establishment policies, strict rules and punishments, militarism, ethnocentrism and intolerance of minority groups, preference for the conventional (e.g., art, clothing, institutions), an anti-hedonistic and sexually restrictive outlook, opposition to scientific progress and superstitious beliefs (Wilson, 1973). By contrast, Altemeyer (1996) remarks that “By ‘right wing authoritarianism’ I mean the covariation of three attitudinal clusters in a person.” (p. 6). These “attitudinal clusters” are strong tendencies towards submission to authority, aggression targeted at those to
whom authority sanctions aggression and acceptance of social conventions. That Altemeyer (1996) views right wing authoritarianism (RWA) as fundamental to all conservative thought is evidenced by a comment in his introduction concerning Timothy McVeigh. McVeigh was an individual who bombed an Oklahoma City federal building and was known to have very right wing political opinions. Obviously, many American conservatives were outraged at McVeigh’s actions and strongly condemned him. Altemeyer’s (1996) comment was that these conservatives who were condemning McVeigh were not different to neo-nazis out to overthrow the US government in terms of kind but only different in terms of degree (Altemeyer, 1996).

These conceptions of conservatism as a personality variable contain a great deal of overlap. For instance, Wilson’s (1973) traits of ethnocentrism and intolerance toward minorities appear to be closely related to Altemeyer’s (1996) attitudinal cluster of aggression towards those against whom society sanctions aggression. Indeed, Altemeyer (1996) acknowledges that while many people would consider RWA to be conservatism, he does not hold this view because he feels that conservatism is not appropriately defined\(^4\). This, of course, invites the question of why Altemeyer (1996) does not present this as a theory of conservatism rather than a new concept but that is not the main point – namely that there seems to be considerable overlap between competing models such as Altemeyer (1996) and Wilson (1973) suggesting that one concept, which can be termed “conservatism”, is at work (Jost et al., 2003; Ray, 1973).

\(^4\) Although, Altemeyer had previously, in Altemeyer (1988), defined conservatism as “a disposition to preserve the status quo, to maintain social stability, to preserve tradition” (p.8).
Analysing conservatism as a personality variable, while it may be useful for designing scales, categorising political parties and so on, does not reveal a great deal about why individuals are conservative or liberal because it is fundamentally descriptive in nature. Thus, psychological research has also examined the cognitive processes underlying conservatism. Jost et al. (2003) performed a meta-analysis of such research and found that several patterns of thought were associated with conservatism. Medium effect sizes were found for dogmatism, intolerance of ambiguity, openness to experience, mortality salience and perceived threats to the stability of the social system. Weak effect sizes were found for uncertainty avoidance, integrative complexity (the extent to which a position has been formed via the process of integrating multiple perspectives), need for order and structure, need for cognitive closure and general fear of threat (Jost et al., 2003).5

The conservative described by Jost et al. (2003) appears to be an unenviable figure. He/she is constantly afraid that the order of society that he/she cherishes is under threat and thus society’s characteristics must be defended in order to protect this social stability. It is this fear then which underlies the core ideas of political conservatism (as discussed earlier in this section). Conservatives do not wish things to change because they believe that this change might threaten the social order. Additionally, the existence

5 It should be noted that Jost et al. (2003) comment that we all engage in conservative thought from time to time and that whether an individual thinks conservatively in a given situation is based on both situational and dispositional factors. Those who we identify as politically conservative are those who think in such a manner about political issues due to dispositional factors (Jost et al., 2003).
of inequality is a less negative outcome than the undermining of the social order and thus conservatives are more prepared to tolerate it.

1.8 Conclusions

Whilst important features such as Kohlberg’s use of hard stages have not been supported by research, Kohlberg’s identification of types of moral reasoning has enabled instruments such as the DIT to measure moral reasoning with some degree of validity.

Political conceptions of liberalism-conservatism deal with the extent to which a person values liberty over other considerations such as social stability whereas psychological investigation has examined conservatism both in terms of personality traits and thought processes.

The present chapter has considered these concepts in isolation. The next chapter builds on this by exploring how these concepts are interrelated both from a theoretical and an empirical standpoint.

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6 Indeed, Jost et al. (2003) comment that in a perfectly egalitarian society, we would expect conservatives to oppose changes that would increase inequality.
Chapter 2

Overview the Relationship Between Kohlbergian Moral Reasoning and the Liberalism-Conservatism Dimension

2.1 Introduction

Chapter 1 examined Kohlbergian moral reasoning and liberalism-conservatism in isolation. The purpose of Chapter 2 is to consider what is known about the relationship between these variables prior to the studies in this thesis. This will be achieved via two means. An initial conceptual analysis of the interrelatedness of the variables will demonstrate that any such relationship between them must be limited in size. After this, research into their relationship will investigate empirical attempts to both estimate the size of the relationship and what is underlying it.

2.2 Conceptual Analysis of the Interrelationship Between Kohlbergian Moral Reasoning and the Liberalism-Conservatism Dimension

Before discussing empirical investigations of how they are linked, it is worthwhile to briefly conceptually evaluate the relationship between Kohlbergian moral reasoning and the liberalism-conservatism dimension. From a theoretical perspective, moral reasoning must, to some extent, be related to the liberalism-conservatism dimension. Turning to the core ideas of conservatism (see Section 1.7), if one places great value on social stability then clearly anything that threatens this must be considered to be morally
bad. Likewise, the degree to which inequality is indefensible as opposed to a necessary evil will influence one’s moral judgements on questions where inequality may be increased or decreased. If one considers the non-psychological political analysis of the liberalism-conservatism dimension (see section 1.8) then clearly liberals will place moral value on those actions that increase social liberty.

However, three theoretical points indicate that moral reasoning and the liberalism-conservatism dimension are distinct (if related) concepts. Firstly, some issues fall in the domain of politics but not morality. An important case is the theoretical and empirical distinction between moral issues and social conventions discussed by Turiel (e.g., 1977, 1994). Shweder, Mahapatra and Miller (1987) suggest that this distinction is somewhat malleable but they observe that people understand the difference between “wrong” acts and those that are “matters of choice” (Shweder et al., 1987). Political orientation can affect social-conventional issues. For instance, some people might consider dining at a restaurant wearing shorts inappropriate but not “morally wrong”. Nevertheless, political leaning could influence perceived inappropriateness - conservatives would probably be more likely to consider it inappropriate. Thus, social conventions provide an example of an area that is outside the moral domain but (at least on some occasions) influenced by liberalism-conservatism. Therefore, politics must cover terrain that morality does not.

Secondly, some issues, e.g., micromorality issues (see Rest et al., 1999a, Rest, Narvaez, Bebeau & Thoma, 1999b for a discussion of macro and micromorality), fall into the domain of morality but not politics. Whether or not to lie to a friend to save them emotional pain is not an issue of social order or liberty but definitely is one of morality although Rest et al. (1999a) acknowledge that (neo-)Kohlbergian frameworks are
primarily concerned with only macromoral issues. Moreover, there are even macromoral issues that fail to fall into the political domain. One example is whether or not to cheat on an exam. This issue is macromoral because it involves one’s interactions with society’s systems. Yet, liberalism-conservatism does not seem to impact on it (though it impacts on the treatment of such a cheater). One can, for instance, construct arguments from liberty both for it (e.g., through enhancement of one’s opportunities) and against it (e.g., through infringement of others’ right to fair procedure). Thus, there are issues that fall outside the domain of liberalism-conservatism but still fall within the moral domain. Therefore, morality must cover terrain that politics does not.

Thirdly, differently staged moral arguments can be produced to support the same political position. For instance, as discussed in Section 1.7, liberals tend to support equal opportunity legislation (Heywood, 1994; Scott, 1997; Tansey, 1995). A stage 5 liberal might justify this in terms of the rights of a minority group being as valuable as the rights of the majority. A stage 3 liberal, however, might justify this in terms of the minority individuals being good people and the need to be good to good people.

What these objections have in common is that they show there are boundaries between moral reasoning and the liberalism-conservatism dimension and, more generally, boundaries between politics and morality. Thus, the extent to which moral reasoning and the liberalism-conservatism dimension are related is not clear – they are related but one is not a subset of the other because each spans terrain that the other does not. The extent of their relationship is an empirical question to which this thesis now turns.

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7 This does not mean that Kohlbergian frameworks cannot be applied to micromoral issues.
2.3 Correlations Between Liberalism-Conservatism and Kohlbergian Moral Reasoning

There have been two main lines of psychological research into the relationship between liberalism-conservatism and Kohlbergian moral reasoning. The first and, perhaps the most straightforward, line is via correlational studies. Several studies have examined the correlations between liberalism-conservatism and Kohlbergian moral reasoning. Correlations between the MJI and political orientation were found before the DIT was developed (e.g., Alker & Poppen, 1973; Fishkin, Keniston & MacKinnon, 1973; Fontana & Noel, 1973; Sullivan & Quarter, 1972). When Rest et al. (1974) introduced the DIT, they reported significant but moderate correlations between p scores and libertarianism ($r=0.37$) and law and order ($r=-0.23$) scales both of which are related to liberalism-conservatism. Since then, studies with various political attitude questions relationships, such as Getz’s (1985) Attitudes Towards Human Rights Inventory (e.g., Narvaez, Getz, Thoma & Rest, 1999), Gold, Christie & Friedman’s (1976) New Left Scale, (e.g., Emler, Renwick & Malone, 1983) as well as self-classified political opinion (e.g., Barnett et al., 1995) and voting intentions (e.g., Thoma, 1993), have indicated significant relationships with p (and often stage 4) scores.

An exception was Feather (1988) who used Wilson and Patterson’s (1968) conservatism scale. Feather (1988) found a significant correlation between conservatism and stage 4, but not p, scores. However, Wilson and Patterson’s (1968) scale seems
outdated\textsuperscript{8}. The scale’s items include, for instance, whether one favours or opposes jazz or pyjama parties, which, given that these seem very outdated, also suggests that they would have been outdated by the mid to late 1980’s (when Feather, 1988 was presumably collecting his data). We must be aware that society’s political norms are not static and, thus, political scales have a shelf-life. Feather’s (1988) is not an isolated case. Indeed, the New Left Scale may have been older than most of the undergraduates who used it in Emler et al.’s (1998) study (and was originally designed to examine the politics of student activism rather than liberalism-conservatism per se).

As societies evolve, the standings of items (in terms of liberalism-conservatism) do not vary amongst themselves. However, the standings of those items relative to the “norms” of societies do vary. Thus, on a given issue, if acceptance of position 2 indicates a more conservative outlook than acceptance of position 1 in one society, it will do so in all societies. Note, however, that acceptance of position 2 may be more indicative of a conservative outlook in some societies than others. Likewise, acceptance of position 1 may be more indicative of a liberal outlook in some societies than others. Position 1 may be a very common view in one society and thus knowing that a person supports position 1 will not tell you a great deal about their liberalism-conservatism. However, knowing that a person supports position 2 would probably be more informative because support for position 2 would be relatively rare amongst moderates in the society. This, of course, would be reversed if position 2 was a very common view in the society – knowing that a

\textsuperscript{8} Collins and Hayes (1993) and Henningham (1996) offer revised versions of Wilson and Patterson’s (1968) scale.
person supported position 1 would probably be more informative than knowing that they support position 2. As noted by Jost et al (2003), situational (and presumably state) factors, such as the political climate of a society, as well as dispositional factors affect whether an individual acts/thinks conservatively in given situations. However, whether one person is more conservative than another in the same situation must address dispositional factors because the situational factors are removed.

Nevertheless, there is little disagreement that political orientation and moral reasoning are related - even Feather (1988) reiterates it despite his mixed findings. The real issue is why. As will be discussed in Chapter 3, there are several possible explanations. However, much of the pre-existing debate has been focussed on one question namely “Is the DIT biased towards liberals?”. As will be discussed in Chapter 3, this is not the only issue but, as will be discussed in the next few sections, it is the issue which has most pre-occupied researchers in the field. Kohlberg (see 1981) made no secret of his liberal affiliations. It is therefore a possibility that, perhaps unconsciously, Kohlbergian and neo-Kohlbergian researchers may have designed instruments with a liberal bias. However, Kohlberg’s political affiliations certainly do not imply that his theory, and refinements of it, are biased towards liberals but do mean that claims of such bias warrant extra scrutiny.

2.4 Introduction to the Faking Paradigm

The second line of research into the relationship between moral reasoning and liberalism-conservatism is the “faking paradigm”. Before these experiments are discussed, this paradigm needs to be explained. The faking paradigm requires
participants to respond to the DIT as if they were another person, that is to respond to DIT items as they imagined that other person would. This approach began with Yussen’s (1976) exploration of stereotypes in moral reasoning. Yussen aimed to show that people believe in stereotypes that suggest philosophers reason postconventionally whereas policemen reason according to stage 4 considerations. Participants answered the DIT from the perspective of themselves, an average policeman and an average philosopher. As predicted, the philosopher perspective had the highest p scores followed by the self then the policeman (Yussen, 1976).

It is important at this juncture to distinguish between two different uses of the word fake. Psychometrically, to fake a score is to systematically attempt to achieve a particular type of score (high, low or moderate). If a person was faking the DIT in this sense of the word, they would, for instance, be trying to produce responses that indicated they had very advanced moral reasoning. In this regard, DIT scores can be faked downwards but upward faking seems impossible (e.g., Hau, 1990; McGeorge, 1975). Hau (1990), for instance, asked participants to fake good or fake bad. P scores went down for the fake bad condition and did not increase for the fake good condition (Hau, 1990). These results are essential evidence of DIT validity because developmentally it should not be possible to fake upwards although faking downwards is possible. Indeed, generally speaking, such results seem hardly surprising because individuals presumably use the system of moral judgements that they consider “best” and thus studies such as Hau (1990) are asking individuals to attempt to utilise a conception of justice/morality

9 One can reason in a less advanced way but not a more advanced way.
that they believe is superior to their own but that they themselves do not ordinarily use. It would seem extraordinary if individuals utilized moral reasoning that they viewed as non-ideal.

Because the second meaning of the word “fake” is discussed, an important qualifier to these results needs to be noted. Such lines of reasoning assume that the only limit to performance is a cognitive one and consequently when individuals are asked to produce the “best” moral reasoning that they automatically try and generate the most advanced reasoning that they can comprehend and employ. However, it is entirely possible that some individuals may actually produce less advanced moral reasoning when answering as themselves or attempting to fake higher because of motivational reasons. This invites the question of whether the “best” moral reasoning is the most advanced or the most easily applied approximation. To a person with low motivation, the latter could easily be the answer. While it is difficult to confirm or refute such an explanation, the possibility must be acknowledged.

Regardless, the meaning of “fake” in the faking studies is, however, a little different. Rather than requiring respondents to attempt to answer the DIT in a manner designed to produce a higher score, faking studies are more about taking the perspective of another individual when answering the DIT. Thus, “faking” here involves responding to the DIT in the same way that another person would (i.e., a philosopher or policeman in Yussen’s (1976) study). Nevertheless, Yussen (1976) demonstrates a method whereby answering the DIT with a particular strategy systematically increases scores. When faking as a philosopher, respondents are apparently engaging in moral reasoning above the level at which they normally reason. From a cognitive-developmental point of view,
this should not be possible because individuals should not be able to perform the cognitive processes required to employ reasoning beyond their own level.

2.5 The Issue of Moral Reasoning Versus Moral Reasoning Item Endorsement

However, this claim that Yussen’s (1976) results indicate usage of more advanced moral reasoning makes the important assumption that, when answering as a philosopher, respondents are actually engaging in moral reasoning. The DIT validity evidence (see section 1.6) does not address the case of the faking paradigm because the DIT was designed to be answered by an individual as a reflection of his or her own moral reasoning. Clearly this is not the case in regards to the faking paradigm.

Conceptually speaking, it is entirely possible that, when faking as a philosopher, respondents merely considered what type of things they thought a typical philosopher would say and found the closest linguistic matches on the DIT. They would not actually be engaging in moral reasoning as the individual would not be making a moral judgement. It would simply be endorsement of moral reasoning items based on language. Thus, an alternate interpretation of Yussen’s (1976) results would be that respondents evaluated postconventional items as sounding like the written language of philosophers and conventional items as sounding like the language of policemen independently of the respondents’ own understanding of the items.

However, this issue is a symptom of a broader concern which applies regardless of whether the DIT is answered as one’s self or as another person. In examining DIT responses in isolation, it is impossible to determine whether an individual is engaging in moral reasoning or merely endorsing items that sound good. An individual may, for
instance, indicate preference for a DIT item because that item appears to support the result of their moral judgement on the dilemma in question\textsuperscript{10}. This is not the same thing as saying they endorsed the moral reasoning \textit{because} they used it to produce their moral judgement because the former does not imply that the moral judgement was made \textit{because} of the moral reasoning endorsed. Kohlbergian and neo-Kohlbergian studies of moral reasoning are designed to understand what moral reasoning individuals utilise to produce their moral judgements not what moral reasoning individuals merely find consistent with their moral judgements.

This issue is not unique to the DIT but applies to any preference-based moral reasoning task. Indeed, this issue can be extended to measures such as the MJI. The MJI does not involve moral reasoning endorsement because it is a production task rather than a preference task. However, there is no guarantee that the moral reasoning communicated to the interviewer is that used by the interviewee to produce their moral judgement (see Section 1.5). This is essentially the same problem as that discussed in the last paragraph – it is difficult to determine whether the moral reasoning that an individual’s indicates they use to produce a moral judgement is indeed the moral reasoning that led to their moral judgement or whether it is merely moral reasoning that is (from their perspective) consistent with it.

\textsuperscript{10} This may be the case even if the item in question does not support the moral judgement but the respondent believes it does.
2.6 Initial Political Faking Study and Criticism of Kohlbergian Moral Reasoning

The significance of this issue of moral reasoning versus item endorsement to the relationship between liberalism-conservatism and Kohlbergian moral reasoning arises as a result of Emler et al.’s (1983) faking study, which was a landmark study in the area. Following in the footsteps of Meehan, Woll and Abbott (1979) who used a similar approach as part of an attack on Hogan and Dickstein’s (1972) Survey of Ethical Attitudes (SEA), Emler et al. (1983) required participants to fake as liberals or conservatives when answering the DIT.

Emler et al.’s (1983) participants classified themselves as left wing, moderate or right wing and answered Gold et al.’s (1976) New Left Scale. Participants answered the DIT as themselves and as either a radical liberal or a radical conservative. The correlational findings discussed in section 2.3 were replicated when respondents answered as themselves - liberal participants displayed more postconventional reasoning than conservative participants, who generally preferred stage 4 reasoning. More importantly, they found that faking as a liberal increased p scores whereas faking as a conservative lowered p scores. (Emler et al., 1983). These findings were cross-culturally replicated by Markoulis (1989).

Emler et al. (1983, see also Emler, 1983) then argued that the domains of Kohlbergian moral reasoning and the liberalism-conservatism dimension overlap to the extent that stage 5 is not developmentally different from stage 4 but merely reflects differences in political philosophy. While earlier Kohlbergian stages are developmental, the main factor that determines whether an individual uses stage 4 or 5 reasoning is their position on the liberalism-conservatism dimension – liberals use postconventional
reasoning and conservatives use stage 4. This distinction between Emler et al.’s (1983) view and the standard Kohlbergian view of explaining the correlation between p scores and liberalism is illustrated in Figure 2.1. Additionally, such moral reasoning (i.e., stage 4 and above) merely consists of judging what viewpoints your liberalism-conservatism position dictates and endorsing the DIT items that best reflect this (Emler et al., 1983).

Emler et al.’s (1983) interpretation essentially argues that the faking procedure is a manipulation of liberalism-conservatism. Respondents always answer the DIT via item endorsement rather than moral reasoning (see section 2.5 for descriptions of these). Furthermore, what drives this endorsement is an individual’s political identity – i.e., in terms of liberalism-conservatism. This, however, is not the only possible explanation. Respondents may only be using item endorsement when faking as another person (e.g., Barnett et al., 1995). Alternatively, respondents may actually be engaging in moral reasoning that is, from the Kohlbergian perspective, more advanced than they would ordinarily use (see discussion of the Politically Mediated Development Hypothesis in Section 3.4). Regardless, Emler et al.’s (1983) results require critical investigation.

2.7 First Criticism of Initial Political Faking Study – Cognitive Developmental Findings

Emler et al.’s (1983) position has been subjected to two main criticisms. The first criticism is that there is considerable correlational evidence that cognitive growth predicts p scores (see Thoma et al., 1986; Thornton & Thornton, 1983 for further discussion of this criticism). These authors argue that this shows that differences in DIT scores are
Figure 2.1. Different causal explanations of the relationship between liberalism and p scores. Hypothesis 1 depicts the standard Kohlbergian model where postconventional reasoning arises as a result of cognitive development and leads to both higher p scores and liberal political positions. Hypothesis 2 depicts the Emler et al. (1983) model where cognitive development is not involved in the relationship but political liberalism causes individuals to merely endorse postconventional items and this leads to increased p scores. Note that Hypothesis 1 begins once an individual has progressed to stage 4 reasoning whereas Hypothesis 2 begins after an individual has progressed beyond stage 3 reasoning.
primarily due to cognitive differences and, hence, that liberals are more cognitively advanced (at least in the moral realm) than conservatives. However, such correlational findings provide little causal evidence. Briefly, that growth in cognitive ability and p score increases occur simultaneously does not necessarily mean that the former causes the later (although it does not eliminate this possibility either).

Thornton, Thornton and Whitney (1991) attempted to find evidence that liberals are more cognitively advanced in the moral realm directly by examining the levels of moral comprehension displayed by liberals and conservatives. They found that moral comprehension predicted liberalism-conservatism and interpreted this as demonstrating that conservative participants produce lower p scores because they have less of an understanding of advanced moral thought (Thornton et al., 1991). However, as noted by Emler et al. (1998), Rest et al. (1974) had failed to find a significant correlation between moral comprehension and either libertarianism and law and order scales ($r=0.08$ and $r=0.12$ respectively) and the comprehension measure had poor reliability (the Cronbach’s Alpha was $\alpha=0.5$ for Thornton et al.’s participants). Low reliability can reduce correlations found with an instrument and thus the existence and/or magnitude of a relationship between moral comprehension and liberalism-conservatism may be being missed by Rest et al. (1974) and Thornton et al. (1991) because of the instrument they employed. Consequently, Thornton et al.'s (1991) findings need to be replicated, preferably with an improved instrument, before they can be considered robust.
2.8 Second Criticism of Initial Political Faking Study – Faking Effect Caused By Anti-Authoritarianism

Barnett et al. (1995) offered an alternate explanation of Emler et al.’s (1983) results. They argued that when faking as a radical liberal, subjects primarily preferred anti-authoritarian items. However, because the DIT contains few anti-authoritarian items (a items), participants ran out of these items and then started choosing p items because they appeared to be the most similar to the a items. As Emler et al.’s (1983) “fake liberal” group showed elevated a scores, as well as p scores (though Markoulis, 1989 did not find as many heightened a scores), this explanation seems plausible. To test it, Barnett et al. (1995) added extra a items, taken from the New Left Scale (Gold et al., 1976), to the DIT to produce a new instrument which had the same number of a items and p items. Barnett et al. (1995) found that, when answering as a radical liberal, a scores rose and p scores decreased (Barnett et al., 1995). The difference between Emler et al.’s (1983) and Barnett et al.’s (1998) conception is illustrated in Figure 2.2.

Emler et al. (1998), in turn, offered three criticisms of Barnett et al. (1995). First they noted that Barnett et al. (1995) were attempting to defend the DIT as a developmental measure but not using the DIT to do this. However, Emler et al.’s (1983) original study has a similar problem. The DIT was established (Rest et al., 1974; 1999a) to model the developmental trends that were observed by Kohlberg and formulated into his theory (e.g., Kohlberg, 1969, 1981, 1984). Emler et al. (1983) challenged this developmental formulation by noting the effect on DIT scores when participants faked as a radical liberal or conservative – a change to the normal administration of the test. Barnett et al. (1995) attempted to defeat this argument by showing that Emler et al.’s
Hypothesis 1 – Emler et al.’s (1983) Account

Instruction to “Fake Liberal” \[\rightarrow\] Increased Liberalism \[\rightarrow\] Preference For P Items \[\downarrow\] Endorsement of P Items


Instruction to “Fake Liberal” \[\rightarrow\] Increased Anti-Authoritarianism \[\rightarrow\] Preference For A Items \[\downarrow\] Endorsement of A Items

Endorsement of P Items \[\rightarrow\] Shortage of A Items \[\rightarrow\] Endorsement of A Items

*Figure 2.2.* Competing explanations for why participants who “faked” the DIT as a liberal, in Emler et al.’s (1983) study, produced higher p scores. Hypothesis 1 postulates that the effect is due to the increased liberalism of these participants causing them to endorse postconventional items. Hypothesis 2 postulates that these participants actually became increasingly anti-authoritarian but ran out of anti-authoritarian items and only endorsed postconventional items because there were no anti-authoritarian items left.
results were caused by the changes in procedure that they employed. However, it was Emler et al. (1983) who first altered the DIT - by changing the instructions. Thus, whether or not using a modified DIT allows one to relate findings to the original DIT decides whether both studies are valid or not. If justified, Emler et al.’s (1998) criticism that using an altered DIT to defend to unaltered DIT is invalid actually undermines the original Emler et al. (1983) study because Emler et al. (1983) altered the DIT (by altering the test instructions).

Secondly, Emler et al. (1998) remark that using the New Left Scale to generate new anti-authoritarian items biased the results as the scale was designed to measure radical left-wing student activist ideology. This claim is stronger because Gold et al. (1976) comment that they developed the New Left Scale after being intrigued that left wing activist students took over the social psychology offices and laboratories at Columbia University (Gold et al., 1976)\(^\text{11}\). If the a items were derived from radical left-wing ideology, it thus seems hardly surprising that subjects in Barnett et al.’s (1995) study should choose such items when faking as a radical liberal.

Finally, Emler et al. (1998) claim that the status of a items, within (or not within) Kohlberg’s stages, has never clearly been established and propose that the a items represent a radical left position, p items represent a moderate left position and stage 4 items represent a conservative position. A series of experiments, e.g., involving political candidate selection committees, were presented in support of this position (Emler et al.,

\(^{11}\) This raises the issue of why the scale was used to classify “normal divisions” of left and right given that it focuses on the radical left but that is another issue.
1998). While attempting to definitively place anti-authoritarianism in a Kohlbergian framework, or showing that it does not belong there is a challenging but potentially fruitful endeavour, this criticism of Emler et al. (1998) is not relevant to the issue at hand namely whether liberals are more morally advanced than conservatives.

2.9 Anti-Authoritarianism is a Theoretical Dead-End in the Investigation of Liberalism-Conservatism and Kohlbergian Moral Reasoning

Attempts to rectify the Barnett et al. (1995) study by improving the anti-authoritarianism item pool seem very problematic because it is very difficult to separate anti-authoritarianism from other political variables such as liberalism-conservatism. The discussion of anti-authoritarianism ignores the fact that such attitudes are not confined to the left. Militia groups in the U.S. are generally considered to be right wing but are known for the anti-authoritarian rhetoric and sometimes actions. Likewise, fascist (including nazi) groups historically have been known to adopt anti-authoritarian attitudes (see Laqueur, 1996 or Eatwell, 1995 for recent histories of fascism).

This issue may have been ignored because DIT anti-authoritarian items generally lean towards left wing anti-authoritarianism – e.g., “whether the greedy and competitive capitalistic system ought to be completely abandoned” (Webster dilemma) or “whether the druggist is going to hide behind a worthless law that only protects the rich anyhow” (Heinz dilemma). Right wing versions of these can easily be constructed - e.g., “whether some minority controlled politician should be able to tell someone who he can or cannot hire” (Webster dilemma) or “whether some corrupt politician is going to deny Heinz’s wife the right to live to pander to some businessman” (Heinz dilemma).
It is very difficult to avoid this bias and measure “true anti-authoritarianism”. One could present respondents with right wing anti-authoritarian items. However, using their own logic against them, Emler et al.’s (1998) critics could claim that this will reduce anti-authoritarian scores in left-wingers because it is presenting items that they, by their ideology, will find repulsive. This may actually further increase their p score difference between left and right wing individuals. Any attempt to develop items that were neither left wing nor right wing would be difficult - one needs a reason to hate authority and stable societies are generally somewhat moderate. A possible solution might be to employ a mixture of radical left and right wing items. However, though this might solve one issue arising from the faking studies, namely what type of reasoning was being increased in Emler et al. (1983), it does not address the more fundamental problem of the issue of item endorsement discussed in Section 2.5. Consequently, an extension of the faking paradigm does not appear to be a good way to continue investigation of the relationship between Kohlbergian moral reasoning and liberalism-conservatism.

2.10 Conclusions

Chapter 2 examined what can be theoretically determined about the relationship between Kohlbergian moral reasoning and liberalism-conservatism and what empirical investigations have revealed. Conceptually, it appears that liberalism-conservatism and Kohlbergian moral reasoning must be related to some degree but neither variable is a subset of the other. Thus, empirical investigation is needed to determine the precise overlap.
Correlational evidence suggests that Kohlbergian moral reasoning is indeed associated with liberalism-conservatism. Traditionally, following Kohlberg (1981), this has been conceptualised as postconventional reasoning causing liberal viewpoints. However, Emler et al. (1983) argues that whether an individual “reasons” at stage 4 or postconventionally is simply caused by their liberalism or conservatism via a process of attitude endorsement (and subsequent justification). Attempts to support or challenge Emler et al.’s (1983) position via the faking paradigm, where respondents answer the DIT as if they were a liberal or a conservative, have only produced a methodological quagmire which cannot be readily overcome.

Thus, a new approach is needed. Chapter 3 begins this approach by outlining a series of hypotheses that purport to explain why measures of Kohlbergian moral reasoning such as the DIT correlate with liberalism-conservatism. By examining the theoretical features of these hypotheses, it should be possible to devise tests of them.
Chapter 3

Hypotheses Concerning the Relationship Between Kohlbergian Moral Reasoning and Liberalism-Conservatism

3.1 Introduction

Chapter 2 argued that the current lines of research had essentially reached an intractable stalemate regarding the methodological appropriateness of the faking paradigm. Chapter 3 aims to present a series of candidate hypotheses that purport to explain why Kohlbergian moral reasoning is correlated with the liberalism-conservatism dimension. As well as describing each hypothesis and evidence for and against it, potential ways of testing each hypothesis will be discussed. This is designed to point the way towards the studies described in Chapters 4 to 7 of this thesis. By focussing on the hypotheses, the intention is to return discussion of the topic to that of why liberalism-conservatism is correlated with Kohlbergian moral reasoning as opposed to debates over the methodological validity of the faking paradigm (see Sections 2.4 - 2.9). It should be noted that this thesis is not being guided by any one particular hypothesis – it aims to examine a range of hypotheses.
3.2 (i) Sophistication Hypothesis

What this thesis terms the Sophistication Hypothesis (so named because sophistication suggests developmental advance) postulates that liberals prefer/produce more postconventional reasoning because they are, in the moral domain at least, more cognitively advanced. Proponents include Thoma (1993), Fishkin et al. (1973) and Thornton et al. (1991). This hypothesis (referred to as the standard Kohlbergian Hypothesis in Section 2.6, where it was diagrammatically represented as Figure 2.1) postulates that answering the DIT involves generation of moral reasoning as opposed to mere item endorsement (see Section 2.5 for a discussion of this issue). Correlations between the MJI and liberalism-conservatism (see Section 2.3) are explained in terms of liberals utilising and then articulating more cognitively sophisticated moral reasoning.

In order to support such an explanation, it would be necessary to find evidence that liberals actually utilise more cognitively sophisticated moral reasoning processes as opposed to merely preferring more “advanced” items. This can be examined by investigating whether either liberals or conservatives can understand a greater variety and/or a higher level of moral reasoning. A moral comprehension task would seem to be a possible candidate here. Rest et al. (1974) found that Cooper’s (1972) moral comprehension task significantly correlated with the Differential Abilities Tests (DAT) at $r=0.41$ which, because the DAT is considered a measure of cognitive ability/development, suggests a cognitive basis for the task.

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12 To avoid confusion, it must be noted this hypothesis does, of course, acknowledge the existence of other factors in shaping an individual’s liberalism-conservatism.
There are, however, psychometric problems with Cooper’s (1972) moral comprehension measure that indicate that it may be inappropriate for such an investigation. Rest et al. (1974) report that the correlation between the DIT and DAT was about \( r = 0.35 \) so it is not clear from this whether Cooper’s (1972) moral comprehension task is more cognitive than the DIT (especially as Rest et al., 1974 do not report any partial correlations). For the argument to be made that the DIT measures the cognitive-developmental variable of moral reasoning (as opposed to mere moral reasoning endorsement) because it correlates with a cognitive moral reasoning component (i.e., moral comprehension) to hold, it needs to be clearly established that the measure in question does measure the cognitive elements of moral reasoning. It is difficult to establish this if the measure in question is not more cognitive in nature than the DIT because this means there is no evidence that the measure is tapping into these cognitive processes any more than the DIT is.

Moreover, as noted in Section 2.7, different experiments measuring the correlation between Rest et al.’s (1974) moral comprehension measure and liberalism-conservatism have produced contradictory results. Thornton et al. (1990) found that moral comprehension and liberalism-conservatism were related but Rest et al. (1974) found that they were not related. Finally, as noted in Section 2.7, this instrument has less than ideal internal consistency, which may have contributed to these contradictory results.

3.2 (ii) Relative Sophistication Hypothesis

By contrast to the Sophistication Hypothesis, which postulates that liberals are always more moral-cognitively advanced than conservatives, the Relative Sophistication
Hypothesis postulates that this depends on the political establishment. Weinreich-Haste (1986) argues that the relationship between moral reasoning and liberalism-conservatism only holds when the political establishment is conservative. When the establishment is conservative, stage 4 individuals will support the establishment by default and thus they will become conservative. Stage 5 reasoners will want to make changes to improve stage 5 related concepts such as rights and justice and, in wanting such changes, will thus become liberal. However, when the political establishment is liberal, stage 4 reasoners will become liberal because they support the political authorities by default. Stage 5 reasoners, however, would be objecting to changes that could reduce rights, justice etc. The relationship between moral reasoning and political orientation would be reversed – conservatives would prefer/produce more postconventional reasoning than liberals (Weinreich-Haste, 1986). A diagrammatic representation of this hypothesis is presented in Figure 3.1.

The Relative Sophistication Hypothesis has been tested via cross-cultural studies. The hypothesis predicts that the relationship between liberalism and postconventional moral reasoning (and conservatism and stage 4 reasoning) should change according to the liberalism-conservatism of the government of the day. Emler and Stace (1999), however, note that the relationship between liberalism and stage 5 reasoning is reasonably stable across geography, time and had indeed been found when the government of the day is left wing (e.g., Markoulis, 1989). Thus, this explanation appears false because the central claim of the Relative Sophistication Hypothesis has not been supported.
Figure 3.1. The Relative Sophistication Hypothesis. This hypothesis postulates that liberalism is only associated with postconventional reasoning when the establishment is conservative. When the establishment is liberal, stage 4 reasoners will actually become liberal (because they identify with the establishment and, consequently, postconventional reasoning will be associated with conservatism.)
3.3 (i) Social Communication Hypothesis

While the Sophistication and Relative Sophistication hypotheses postulate that the moral reasoning differences between liberals and conservatives are reflective of a cognitive difference, Emler et al.’s (1983, 1998) Social Communication Hypothesis postulates that differences in moral reasoning are caused by individuals attempting to communicate their political identity (e.g., Emler et al., 1983, 1998; Emler and Stace, 1999). The term “Social Communication” is taken from Emler and Stace’s (1999) description of this hypothesis and, over time, Emler and his colleagues have refined this hypothesis resulting in three versions of it (i.e., Emler et al., 1983 and 1998 and Emler & Stace, 1999). Because of similarities between the first two versions of the hypothesis, it is perhaps more prudent to examine the first two versions separately to the third. A diagrammatic representation of the Social Communication Hypothesis is provided in Figure 2.1 where it was presented as Emler et al.’s (1983) account.

Emler et al. (1983) argued that there was no developmental difference between stage 4 and stage 5 reasoning. Instead, they argued that conservatives viewed stage 5 reasoning as representative of liberal thinking. Thus, conservatives would refuse to indicate preference for stage 5 arguments on the DIT because this would be equivalent to endorsing liberal positions. Likewise in the MJI they do not produce stage 5 arguments because this would be equivalent to producing liberal arguments. It is important here to note Emler et al.’s (1983) position on the issue of item endorsement (see Sections 2.5 and 2.6). Emler et al. (1983) are arguing that moral reasoning (above stage 4) is merely post-
hoc justification for political attitudes (most saliently those arising from the liberalism-conservatism dimension).

Later, Emler et al. (1998) altered the mechanism of the Social Communication Hypothesis. They argued that liberals produce higher p scores because they view stage 4 reasoning as representative of conservative thought. Furthermore, Emler et al. (1998) argue that both liberals and conservatives believe that their positions are perfectly consistent with “the social contract, utility and human rights arguments which are defined in Kohlberg’s theory as stage 5” (p. 472). Thus, liberals and conservatives have similar underlying moral reasoning processing but these get “overridden” by the desire to present themselves politically. Note that this mechanism is not inconsistent with the Emler et al. (1983) mechanism and thus there is no reason why the correlation could not be driven by both mechanisms.

To be supported, these accounts need to show, firstly, that liberals are not more cognitively advanced (i.e., by the methods discussed for the Sophistication Hypothesis) than liberals. Secondly, it needs to be able to demonstrate that in cases where the potentially political nature of moral reasoning has been altered, the relationship between moral reasoning and liberalism-conservatism is similarly affected. This can, in turn, be assessed in two ways. One way would be to design moral reasoning dilemmas with content such that conservative presentation would be consistent with postconventional reasoning and liberal presentation would be consistent with stage 4 reasoning. In such a circumstance, the Social Communication Hypothesis would predict that conservatives would prefer more postconventional reasoning and liberals prefer more stage 4 reasoning.
Another way would be to design an indirect measure of moral reasoning. Such a measure would not give individuals the opportunity to present themselves politically because it would not require them to endorse or indicate preference for moral reasoning alternatives. As noted two paragraphs above, the Social Communication Hypothesis postulates that there is actually no systematic difference in the underlying moral reasoning process of liberals and conservatives. However, when individuals are asked to explain their moral reasoning (e.g., as on the MJI) or indicate what moral reasoning seems more applicable (as in the DIT), then they merely attempt to justify their political attitudes. Consequently, an indirect measure of moral reasoning should not produce differences between liberals and conservatives because it does not provide an opportunity for the postulated mechanism of post-hoc justification to occur.

3.3 (ii) Revised Version of the Social Communication Hypothesis

Emler and Stace (1999) offered a broader version of the Social Communication Hypothesis. They argue that a person’s moral reasoning is a function of their social goals as well as their capacity to produce moral reasoning. Conservatives produce lower p scores because stage 4 arguments reflect the social identity that they wish to convey. It must also be noted that Emler and Stace (1999) do not dispute the possibility that stage 5 reasoning is “structurally more complex” (p. 458) than stage 4 reasoning. They do, however, dispute that conservatives “are unable to either generate or understand stage 5 arguments” (p. 459) – i.e., they dispute the Sophistication Hypothesis.

Emler and Stace (1999) argued that certain findings offered experimental support for their version of the Social Communication Hypothesis. They found that stage 4 moral
arguments were perceived as more conservative than stage 5 moral arguments. They also cite Reicher and Emler (1984) who had found similar findings involving DIT responses. While consistent with the hypothesis, these findings are poor evidence for this hypothesis because they fail to address the main mechanism of the hypothesis. They are not examining whether people are attempting to convey an identity using moral reasoning tasks. They are merely asking other people to perceive whether an identity is present. Demonstrating that an individual perceives certain moral arguments as liberal or conservative is very different to demonstrating that they actually employ these moral arguments to communicate their political identity.

Even if people’s perceptions are accurate in this regard, these findings do not address the possibility that the identity is being perceived despite the individual not trying to communicate it. Indeed, Emler and Stace’s (1999) and Reicher and Emler’s (1984) findings are consistent with the Sophistication Hypothesis. This hypothesis would simply say that people accurately perceive that liberals are more likely to use stage 5 reasoning and conservatives more likely to use stage 4 reasoning. In short, these studies reveal nothing about the underlying processes of the relationship between liberalism-conservatism and moral reasoning because they investigate the political nature of the perception of moral reasoning rather the political nature of moral reasoning itself. Emler and Stace (1999) furthermore fail to even establish whether individuals are actually motivated to present themselves as liberal or conservative when engaging in moral reasoning.

One interesting finding of Emler and Stace’s (1999) study is potentially problematic. They noted that 27.4% of their participants did not find moral arguments
informative about whether the individual making them was relatively left or right wing (20.9% responded similarly for reactionary v progressive\textsuperscript{13}). This data suggests a limit to the extent to which the political position being conveyed is being seen. This does not, however, establish that there is no attempt to convey a political identity. Based on the finding that this lack of informativeness was most prevalent in those participants who had defined themselves as not having a political position, Emler and Stace (1999) argue that this is simply due to expertise – that only politically sophisticated people can decode these responses. If this is true then the question arises “What is the point of communicating?” In this regard, it seems counterproductive that one would choose moral arguments to convey a political identity only to ensure that (at least some) people couldn’t understand what political identity was being conveyed. A potential reply, however, is that individuals are unaware that their identity messages are not being understood but Emler and Stace need to provide stronger data in support of this contention.

Regardless, Emler and Stace (1999) are assuming that political identity is a very strong force. They assert that people answer a moral reasoning questionnaire with the goal of asserting a political identity (Emler & Stace, 1999)\textsuperscript{14}. Obviously, then, Emler and Stace (1999) must believe that this political identity is very strong as it affects the

\textsuperscript{13} Reactionary is usually considered to be more right wing than conservative (see Section 1.7). Progressive can be considered roughly synonymous with liberal (Scott, 1997).

\textsuperscript{14} This also invites the question of what happens in moral reasoning situations where the moral does not overlap with the political (see Section 2.2).
response on a task that is not overtly political. However, in his exploration of the applicability of social identity theory to politics, Greene (1999) found that identification with a political party varied significantly between strong and weak supporters (of the party). Greene’s (1999) results suggest that assuming a strong political identity does not automatically arise from leaning towards a political position. Greene’s (1999) findings cause complications for Emler and Stace (1999) because they are assuming that all respondents adopt a strong political identity. Emler and Stace can perhaps reply by arguing that their political identity is somehow different to party political identity but they would need to provide strong evidence for such a claim. Thus, there seems to be significant empirical problems with Emler and Stace’s (1999) formulation of the Social Communication Hypothesis.

### 3.4 Politically Mediated Development Hypothesis

While, as discussed throughout Chapter 2, much of the prior research into the relationship between Kohlbergian moral reasoning and liberalism-conservatism has involved either the Sophistication Hypothesis or the Social Communication Hypothesis, these are certainly not the only possible hypotheses. Consequently, this thesis will consider some new hypotheses. Note that multiple new hypotheses are being introduced because, as discussed in Section 3.1, this thesis aims to consider a wide variety of hypotheses.

The Politically Mediated Development Hypothesis is one such hypothesis that has been formulated for this thesis. Like the Social Communication Hypothesis, it postulates that increased $p$ scores are indicative of advanced liberal moral reasoning but not
advanced conservative moral reasoning. However, like the Sophistication Hypothesis, the hypothesis postulates that there is a cognitive difference between stage 4 and stage 5 reasoning. In this respect, the Politically Mediated Development Hypothesis incorporates features of both hypotheses.

Before the fusion is explained, it is important to note the Politically Mediated Development Hypothesis assumes that responses on the DIT (and the MJI) reflect actual moral reasoning (as opposed to mere item endorsement; see Section 2.5). Thus, from the perspective of the hypothesis, any discussion about whether DIT responses are appropriate for gauging an individual’s moral reasoning are irrelevant – the hypothesis assumes that they are.

Keeping this in mind, a person cannot reason at stage 5 if they cannot comprehend stage 5 moral reasoning thought. In support of this, significant correlations between p scores and moral comprehension have been found (e.g., Rest, 1979, 1986; Rest et al. 1974 but see Section 3.2 for criticisms). However, these correlations are not perfect and it is therefore possible that somebody will reason at stage 4 even if they can understand stage 5 reasoning.

There is an underlying assumption in Kohlbergian theory (e.g., Colby et al., 1987) that just because a person can use postconventional reasoning they will. The Politically Mediated Development Hypothesis disputes this assumption. Instead, it argues that the final decision to use or not to use postconventional reasoning is based on a politically related factor. There is no lack of moral comprehension (or any other cognitive factor) that prevents conservatives from constructing and utilising postconventional moral reasoning to the same extent as liberals. The key developmental marker is not whether
postconventional reasoning is actually employed or not but merely whether the cognitive ability to construct it exists. The Politically Mediated Development Hypothesis is presented diagrammatically in Figure 3.2.

Hence, the Politically Mediated Development Hypothesis postulates that a liberal who never attains the stage 5 cognitive-developmental framework – a component of which would be the moral comprehension necessary to construct stage 5 arguments - will never utilise stage 5 moral reasoning. Indeed, it can be argued (see Rest et al, 1999b) that the political correctness of the 1980’s was an example of stage 4 (or even stage 3), liberal reasoning. However, liberals who do obtain this framework will generally use postconventional reasoning. Conservatives, on the other hand, will not generally use postconventional moral reasoning even if they obtain the necessary cognitive-developmental framework. Why conservatives do not utilise postconventional reasoning when they can is not important at this level of analysis but the work of Jost et al. (2003) discussed in Section 2.7 provides several possibilities such as dogmatism and intolerance of ambiguity.

The main point is that when a given person has the cognitive structure to construct stage 5 moral arguments, he/she will tend towards stage 4 if conservative and stage 5 if liberal. This hypothesis is essentially dividing the stage 4/5 boundaries into two distinctions - a distinction of moral comprehension and a distinction of moral reasoning choice. Indeed, even though this hypothesis postulates that the relationship between moral reasoning and political orientation is due to political factors, it argues that the stage 4/stage 5 boundary is both cognitive and political – to merely obtain the moral
Figure 3.2. The Politically Mediated Development Hypothesis. This hypothesis postulates that an individual who does not obtain the ability to construct postconventional reasoning will not reason postconventionally (nor record responses indicating such reasoning). However, if an individual does obtain the cognitive ability to construct postconventional reasoning, they are more likely to do so if they are liberal. Conservatives more often reason non-postconventionally even though they can reason postconventionally.
comprehension is a cognitive requirement but to utilise the reasoning also requires a certain political position. In this sense, both the Emler et al. (1983) position that the boundary is attitudinal in nature and the Thornton et al. (1991) position that it is cognitive are both correct but both incorrect because the boundary is cognitive but politically mediated.  

Essentially then, support for the Politically Mediated Development Hypothesis can be found by cases where the relationship between liberalism-conservatism and moral reasoning related tasks varies according to whether moral reasoning per se or the framework behind it are being examined. Measures probing the framework itself (such as a moral comprehension task) should not be correlated with liberalism-conservatism (unlike the DIT or MJI; see Section 2.3). Additionally, one would expect that the correlation between DIT scores and moral comprehension scores would be greater for liberal respondents than conservative respondents because liberals who could comprehend stage 5 reasoning would be more likely to utilise such reasoning.

3.5 Two Paths Hypothesis

It is, of course, entirely possible that both cognitive-development and political factors combine to produce one’s moral reasoning (e.g., Rest et al., 1974, 1999a). This is not a particularly radical claim – the issue is how and where they interact and each of the models discussed so far has postulated ways in which this interaction occurs. These factors might, however, not interact at all – they might be completely independent. This

15 Or each is only referring to one facet of the boundary.
is the underlying premise of another hypothesis that has been constructed for this thesis - the Two Paths Hypothesis. The hypothesis postulates that an individual may endorse postconventional reasoning because of *either* political or developmental reasons (or both) yet these attitudinal and cognitive factors might be independent.

Whether an individual was liberal or conservative, they would be more likely to reason postconventionally if they were more advanced cognitively. This “developmental path” would thus be attitudinally neutral. However, there would be another way by which individuals could produce higher *p* scores – the “political path”. This “political path” does not, however, involve moral reasoning *per se* but mere item endorsement (see Section 2.5). Moreover, it allows (liberal) individuals to endorse postconventional reasoning even if they lack the cognitive development to actually utilise that reasoning.

The Two Paths Hypothesis maintains that to be liberal generally involves endorsement of some postconventional ideals. If you are a liberal, the hypothesis postulates that in general you will support ideals such as basic human rights and utilitarian considerations. However, as discussed in Section 2.5, endorsing a position (or, in DIT terms, indicating that it is important) is not the same as understanding it. The Two Paths Hypothesis argues that, to some extent, liberal endorsement of more DIT *p* items than conservatives is simply a function of them being unable to understand the full details of those arguments. Note that the Two Paths Hypothesis does not dispute that some liberals, and indeed some conservatives, endorse postconventional items because they are genuinely reasoning postconventionally. However, some liberals are endorsing postconventional items because they “believe in them” even if they don’t fully appreciate
what they “believe” in. A diagrammatic representation of the Two Paths Hypothesis is presented in Figure 3.3.

This hypothesis is essentially a hybridisation of the Sophistication Hypothesis and the Social Communication Hypothesis. Like the Sophistication Hypothesis, it maintains that cognitive development can lead to postconventional reasoning (and consequently postconventional item endorsement). However, it diverges from the Sophistication Hypothesis by disputing that moral reasoning item endorsement is always indicative of actual moral reasoning and that moral reasoning differences between liberals and conservatives are moral-cognitively based. Like the Social Communication Hypothesis, it postulates that non-cognitive political differences can lead to differences in moral reasoning item endorsement between liberals and conservatives. However, it diverges from the Social Communication Hypothesis by maintaining that utilisation of postconventional moral reasoning is more advanced than utilisation of stage 4 moral reasoning and, moreover, that this is the case for both liberals and conservatives.

This Hypothesis has the virtue of being able to explain the results of disparate manipulations of DIT scores. For instance, McNeel’s (1994) finding (mentioned in Section 1.6) that the “college effect” of the DIT was greater than that of other developmental abilities (such as verbal and general ability) can be explained in terms of both the university experience making people more liberal as well as the university experience increasing moral-cognitive development. Additionally, Emler et al.’s (1983) faking study (see Section 2.6) can be explained in terms of respondents focussing solely
Figure 3.3. The Two Paths Hypothesis. This Hypothesis postulates that, while measures such as the DIT and MJI, are measuring cognitive-development moral reasoning for both liberals and conservatives to some extent, some liberals will endorse postconventional items that are beyond their cognitive development.
on the political path when they faked as a liberal or conservative.\textsuperscript{16} In short, this hypothesis provides a mechanism of how effects on political or cognitive-developmental factors can independently influence DIT scores without influencing each other.

Because the Two Paths Hypothesis postulates that the political factors and cognitive-development factors that influence DIT scores act independently to each other, one would expect that these would not be correlated to the extent that controlling for one would eliminate the correlation the other had with DIT scores. Additionally, this Hypothesis predicts moral comprehension should be equally correlated with moral reasoning when both liberals and conservatives are considered separately because of the political-neutralness of the “cognitive path”.

3.6 Breadth of Reasoning Hypothesis

All the hypotheses discussed so far have considered that the relationship between Kohlbergian moral reasoning and liberalism-conservatism involves stage 4 and postconventional reasoning – the Breadth of Reasoning Hypothesis postulates the relationship extends to pre-stage 4 reasoning. While the Breadth of Reasoning Hypothesis is another hypothesis that has been constructed for this thesis, it depends on Rest et al. ’s (1999a, 1999b) conception of moral reasoning schemas because the hypothesis is inconsistent with a hard stage conception of moral reasoning. The Breadth

\textsuperscript{16} Indeed, in this context, Emler et al. ’s (1983) instructions can be reinterpreted as “think politically liberal” (or “think politically conservative” depending on condition) when faking as opposed to “what is your reasoning about this”.

of Reasoning Hypothesis postulates that the correlation arises because liberals use a more diverse range of moral reasoning than conservatives. As was mentioned in Section 1.7, dogmatism is considered a feature of conservative thought (Altemeyer, 1988; Jost et al., 2003). Conservatives may be dogmatic when it comes to moral reasoning and Stage 4 reasoning may be a predominant feature of conservatism to the extent that there may be very little use of non-stage 4 reasoning by conservatives.17

The Breadth of Reasoning Hypothesis also postulates that liberals, as a group, are not drawn to any particular type of moral reasoning and hence, when compared to conservatives, use a diverse range of moral reasoning. Some liberals will use postconventional reasoning, some will use stage 4 reasoning18 and some will use stage 1,2 and/or 3 reasoning. Thus, as well as utilising more postconventional reasoning than conservatives, liberals would also utilise more preconventional and stage 3 reasoning (but less stage 4 reasoning). A diagrammatic representation of the Breadth of Reasoning Hypothesis is presented in Figure 3.4.

This hypothesis makes two testable predictions. Firstly, liberalism should be associated with other forms of moral reasoning such as stage 2, stage 3 and anti-authoritarian moral reasoning. Also, following the work of Lind (1995), a stage-consistency measure (i.e., how rigidly you are locked into one stage of moral reasoning)

17 Determining whether stage 4 reasoning makes one conservative or conservatives are drawn to stage 4 reasoning is irrelevant to this hypothesis.

18 The Breadth of Reasoning Hypothesis could easily be re-formulated such that no liberals use stage 4 reasoning.
Figure 3.4. The Breadth of Reasoning Hypothesis. This Hypothesis postulates that while conservatives are rigidly locked into stage 4 reasoning, liberals use a wide variety of moral reasoning. This leads to them using both more postconventional and more pre-stage 4 moral reasoning but less stage 4 moral reasoning.
has been developed for the DIT (see Rest et al., 1997a). If the Breadth of Reasoning Hypothesis is correct then this measure (c score) should be correlated with conservatism.

3.7 Importance Hypothesis

The Importance Hypothesis is another hypothesis that has been formulated for this thesis and postulates that the relationship between liberalism and conservatism is issue based. The Hypothesis postulates that liberals do not utilise more postconventional reasoning but the DIT finds correlations because it concentrates on left wing issues. Table 3.1 lists the issues that DIT dilemmas address.

Table 3.1 reveals that as a collection of issues these appear to favour issues which liberals deem important. It may be that this is unproblematic or it may be that this item bias allows another explanation. People may utilise more postconventional reasoning when evaluating personally pertinent issues. Thus, if we presented moral dilemmas involving right wing issues, conservatives would use more postconventional reasoning. This would be consistent with the finding that requiring people to discuss moral issues results in increased p scores (see Schaefli et al., 1985) because liberals presumably spend more time discussing liberal issues and conservatives spend more discussing conservative issues. It is also consistent with Jost et al.’s (2003) notion that both individual and context can affect the extent to which a person is conservative. A diagram of the Importance Hypothesis is provided in Figure 3.5.

The results of Sparks and Durkin (1987) support the Importance Hypothesis. Using a sample with an approximately equal number of Labour and Conservative voters (the study was done in Britain), they asked participants to evaluate the importance of
Table 3.1

*DIT Dilemma Topics*

<table>
<thead>
<tr>
<th>Dilemma</th>
<th>Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heinz and the Drug</td>
<td>Right to healthcare/survival</td>
</tr>
<tr>
<td>Escaped Prisoner</td>
<td>Punishment of a rehabilitated offender</td>
</tr>
<tr>
<td>Newspaper</td>
<td>Right to free speech</td>
</tr>
<tr>
<td>Doctor’s Dilemma</td>
<td>Euthanasia</td>
</tr>
<tr>
<td>Webster</td>
<td>Minority Rights</td>
</tr>
<tr>
<td>Student Take-over</td>
<td>Students’ right to decide university policy</td>
</tr>
</tbody>
</table>
Figure 3.5. The Importance Hypothesis. This Hypothesis postulates that liberals utilise more postconventional reasoning on issues important to liberals but conservatives utilise more postconventional reasoning on issues to conservatives.
democratic principles and individual rights (as examples of postconventional reasoning) to two related issues – one right wing and one left wing. On the liberal issue, they found that Labour voters thought these were more important than Conservative voters did but that this relationship was reversed on the conservative issue (Sparks & Durkin, 1987).

Two objections need to be noted. Firstly, the study does not determine whether conservative voters actually prefer postconventional items (on the right wing issue) to stage 4 items. Whilst conservatives do consider them more important, Sparks and Durkin’s (1987) data does not reveal whether or not conservatives consider them sufficiently more important that they would choose such reasoning over stage 4 reasoning. Secondly, Sparks and Durkin (1987) also asked for ratings of the importance of the law and social order on these issues but did not seem to report them. Furthermore, Holley (1991) examined a similar issue in the area of religiosity – highly religious individuals also tend to score lower on the DIT. She added items of a religious nature to the DIT but found correlations with various religiosity measures did not differ with the dilemma type. However, Holley failed to find a general correlation between religiosity and the DIT (unlike previous studies) and thus her results need replication (Holley, 1991). Thus, the evidence is ambiguous in regard to the Importance Hypothesis.

The Importance Hypothesis could be tested by constructing an alternate version of the DIT where the issues were predominantly those that were important to conservatives. Because, the usual issue bias would be reversed, the Importance Hypothesis predicts that conservatism should be correlated with postconventional reasoning in this case. Additionally, the Importance Hypothesis predicts that, on DIT issues, liberals should be more advanced than conservatives.
3.8 Ipsative Hypothesis

The hypotheses so far have attempted to provide mechanisms for the relationship between Kohlbergian moral reasoning and liberalism-conservatism. By contrast, the Ipsative Hypothesis postulates the relationship is largely a product of the demand characteristics of moral reasoning instruments. The Ipsative Model has been named for this thesis although, as discussed later in this section, Emler (e.g., Emler et al., 1998) has made various points about the DIT’s ipsativity.

It must not be forgotten that the correlation between liberalism and postconventional reasoning is not the only observed correlation between political orientation and moral reasoning. This finding occurs together with the finding that conservatives utilise more stage 4 reasoning. Indeed, some of the hypotheses discussed in the last chapter (e.g., Emler et al.’s (1998) version of the Social Communication Hypothesis, Choice Hypothesis, Breadth of Reasoning Hypothesis) place considerable importance in the stage 4-conservatism correlation. Thus, any understanding of the relationship between political orientation and moral reasoning should address the correlations between liberalism-conservatism and both stage 4 and postconventional reasoning.

A straightforward approach would be to simply state the correlation between stage 4 and conservatism is a by-product of the correlation between postconventional reasoning and liberalism. If liberals are more concerned with postconventional considerations conservatives must be more concerned with some other type of moral reasoning. This just happens to be stage 4 reasoning. However, this ignores an important feature of DIT
scoring. Emler (e.g., Emler et al, 1998) has noted that the DIT is partially ipsative\textsuperscript{19}. The DIT Manual (Center for the Study of Ethical Development, 1990) notes that DIT scores are based on a weighted proportion of item-type preferences. For each of the 6 DIT dilemmas, 12 items (representing different types of moral reasoning) are presented. The item that respondents rank as most important is worth 4 points; the second most important item 3 points; the third most important item 2 points and the fourth most important item 1 point (Center for the Study of Ethical Development, 1990).

Thus, for a given dilemma, a person who designates postconventional items as the most and third most important items and stage 4 items as the second and fourth most important items would (for that dilemma) have a stage 4 score of 4 and a p score of 6. All other scores (e.g., a score, stage 3 score) would be 0 for that dilemma. This procedure is performed for each dilemma and the scores over the whole scale (which are the scores usually reported) are obtained by summing the scores for each dilemma. Some indices (e.g., p scores) are then converted to a percentage but this will not affect any correlations obtained\textsuperscript{20} (Center for the Study of Ethical Development, 1990).

The critical issue is that, for a given dilemma, an individual cannot place multiple types of reasoning as the most important. Very high scores for one type of moral reasoning preclude high scores for other types of moral reasoning. An individual may consider postconventional items as only slightly more important than stage 4 scores.

\textsuperscript{19} “Partially” ipsative because the scoring system still allows for some measurement of one type of reasoning if another type of reasoning is preferred more (unlike the MJI).

\textsuperscript{20} Because correlations are unaffected by linear transformations performed on the correlating variables.
However, if this meant that they responded by putting postconventional considerations as
the first two items for each dilemma (each dilemma has 3 or 4 postconventional items)
then their p score would be 70 and the absolute maximum stage 4 score (as a percentage)
they could get would be 30. This would be despite the fact that they viewed
postconventional considerations as only slightly more important than stage 4
considerations.

It can be argued that perhaps the moral reasoning differences between liberals and
conservatives are actually quite small but have been magnified by the ipsative nature of
the DIT. This cannot be countered by referring to correlations between political
orientation and Kohlberg’s MJI because the MJI is even more ipsative that the DIT
(respondents’ reasoning on each dilemma is strictly classified on an either/or basis).

3.9 Testing the Hypotheses

This chapter has described several candidate hypotheses. A summary of what
each hypothesis proposes about the main theoretical issues is provided in Table 3.2. The
studies carried out in this thesis (described in the next four chapters) aim to distinguish
between these hypotheses. As well as enabling an understanding of what is driving the
correlation between liberalism-conservatism and moral reasoning (as noted in Chapter 2,
prior efforts here have stalled), this research will address important issues in both politics
and morality. In terms of politics, this research will provide an insight into possible
cognitive differences (in the moral realm) between liberals and conservatives. In terms of
morality, this research will investigate the issue of true moral reasoning as opposed to
mere moral reasoning item endorsement.
Table 3.2

*Theoretical Features of Competing Hypotheses*

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>True Reasoning</th>
<th>Liberals Advanced</th>
<th>All Measures</th>
<th>Other Stages[^4]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sophistication</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Social</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choice</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Two Paths</td>
<td>Some[^a]</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Breadth of</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Reasoning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance</td>
<td>Yes</td>
<td>Issue</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

[^1] Whether the hypothesis postulates that responses to moral reasoning tests actually reflect moral reasoning utilised by an individual or are merely endorsements of moral reasoning perceived to be consistent with that individual’s moral judgements.

[^2] Whether the hypothesis postulates that liberals *are* more morally advanced than conservatives.

[^3] Whether the hypothesis predicts that liberals always *appear* more morally advanced than conservatives.

[^4] Whether the hypothesis predicts a relationship between liberalism-conservatism and other types of moral reasoning (e.g., stage 2, stage 3).

[^a] Responses reflect moral reasoning utilised for all conservatives and some liberals.

[^b] Liberals are more morally advanced on liberal issues and conservatives are more morally advanced on conservative issues.
As noted earlier in this chapter, the Relative Sophistication Hypothesis (see Section 3.3) and the Emler and Stace (1999) version of the Social Communication Hypothesis (see Section 3.5) both seem implausible. The following hypotheses are, however, viable candidate hypotheses that need to be tested if an understanding of how moral reasoning and liberalism-conservatism are related is to be achieved – the Sophistication Hypothesis, the Emler et al. (1983, 1998) version of the Social Communication Hypothesis, the Politically Mediated Development Hypothesis, the Two Paths Hypothesis, the Breadth of Reasoning Hypothesis, the Importance Hypothesis and the Ipsative Hypothesis. The following studies will test these hypotheses. By achieving this, it is hoped that an insight will be gained into the underlying processes of our moral judgements and how these relate to our politics.

3.10 Conclusions

Chapter 3 introduced a series of candidate hypotheses that purport to explain the correlation between liberalism-conservatism and Kohlbergian moral reasoning. While two of these hypotheses seem implausible, seven of them are viewed as potential candidates (See Section 3.11). These hypotheses make differing claims on issues such as whether moral reasoning tasks such as the DIT measure the moral reasoning underlying one’s moral judgement or merely moral reasoning that is consistent with these moral judgements and whether there is a moral-cognitive difference between liberals and conservative. Chapter 4 will begin this thesis’ empirical evaluation of these hypotheses.
Chapter 4

Study 1

Measuring Moral Reasoning with an Indirect, Non-Ipsative Instrument

4.1 Introduction

Chapter 3 presented a series of candidate hypotheses of the relationship between liberalism-conservatism and Kohlbergian moral reasoning. Chapter 4 begins the testing of these hypotheses by examining three of these hypotheses. Both the Social Communication Hypothesis (see Section 3.3) and the Ipsative Hypothesis (section 3.8) will be tested by examining the relationship between an indirect, non-ipsative measure of moral reasoning and liberalism-conservatism. Additionally, the Breadth of Reasoning Hypothesis (see Section 3.6) will be tested by examining the relationship between liberalism-conservatism and a variety of DIT scores.

4.2 Testing the Breadth of Reasoning Hypothesis via Examination of DIT Scores

As noted in Section 3.6, the Breadth of Reasoning Hypothesis postulates that liberals use a wider variety of moral reasoning than conservatives, who mostly prefer stage 4 reasoning. Consequently, the hypothesis predicts that liberals should prefer other types of moral reasoning, such as stage 2, stage 3 and anti-authoritarian reasoning, more than conservatives. It also predicts that DIT c scores (see Rest et al. 1997a), which
measure how consistently an individual reasons within a given stage, should be positively correlated with conservatism because consistency in selecting one stage of moral reasoning is conceptually equivalent to a lack of breadth in selecting moral reasoning.

4.3 Testing the Social Communication and Ipsative Hypotheses via a Non-Ipsative Indirect Measure of Moral Reasoning

As noted in Section 3.4, the Social Communication Hypothesis (as described by Emler et al., 1983, 1998)\(^{21}\) postulates that, in essence, there is no distinction between liberal and conservative moral reasoning. Once an individual has progressed beyond stage 3 moral reasoning, their political identity dictates their moral judgements and they merely endorse moral reasoning that is consistent with these moral judgements (see Emler, 1983; Emler et al, 1983, 1998).

This raises an important conceptual issue. The Social Communication Hypothesis thus predicts that conservative preference for stage 4 moral reasoning and liberal preference for postconventional reasoning only arises after an individual has post-hoc (i.e., after the individual has made the moral judgement) considered moral reasoning. This is because, according to the hypothesis, it is the act of justifying an individual’s moral judgements that leads them to examine moral arguments and decide upon moral reasoning (consistent with their political identity) to endorse.

\(^{21}\) In Section 3.3 (ii), it was argued that the Emler and Stace (1999) version of the Social Communication hypothesis was conceptually untenable.
Consequently, if individuals’ moral reasoning could be examined without requiring them to consider moral reasoning then the Social Communication Hypothesis predicts that liberals and conservatives should not differ because it postulates that post-hoc examination of moral reasoning leads to differences. Thus, this hypothesis predicts that on an indirect measure of moral reasoning – a measure of moral reasoning that does not require post-hoc consideration of moral reasoning (e.g., via endorsement or production of moral reasoning) – liberals and conservatives should not differ.

As noted in Section 3.8, the Ipsative Hypothesis argues that the moral reasoning of liberals and conservatives is not greatly different. Hence, the moral reasoning scores of liberals and conservatives would not differ significantly\(^\text{22}\) on a non-ipsative measure of moral reasoning. Thus, on an indirect measure of moral reasoning that was not ipsatively scored, both the Social Communication Hypothesis and Ipsative Hypothesis would predict no difference in moral reasoning between liberals and conservatives.

4.4 Developing a Non-Ipsative Indirect Measure of Moral Reasoning

Thus, the derivation on a non-ipsative indirect measure of moral reasoning would be useful in terms of understanding the relationship between liberalism-conservatism and Kohlbergian moral reasoning. The present thesis section uses a conceptual analysis to derive the composition of such a measure.

\(^{22}\) If an enormous sample was used, the Ipsative Hypothesis would predict a difference because of the consequent enormous statistical power.
Stage 4 moral reasoning is, in essence, characterised by the social order (e.g., law) revealing/dictating moral positions (e.g., Kohlberg, 1984; Colby & Kohlberg, 1987). Law (i.e., the legal system) is a very important social system. At least some stage 4 reasoners strongly value “the law” as a determinant of morality. This may not be true of all stage 4 reasoners because some value other social systems such as religion. Nevertheless, legality is an important determinant of morality for many stage 4 reasoners because it is one of the major ways in which social norms are systematised (see Colby et al., 1987). Thus, many stage 4 reasoners engage in underlying mental processes that, to some extent, link morality to legality.

Consequently, an alternate way to measure some stage 4 moral reasoning is to determine the degree to which individuals link morality to legality23. If individuals are required to rate both the illegality and the (im)morality of a given act then individuals who more strongly value stage 4 concepts would be more inclined to rate the act as very immoral if they perceived it to be very illegal. Moreover, if these perceived illegality and perceived immorality ratings were generated for a series of acts then we would expect a stage 4 individual to rate acts that they perceive to be illegal as more immoral than acts that they perceive to be less illegal.

The degree to which the variables are linked is determined by their covariance or correlation (Howell, 2002). Thus, to determine the extent to which a given individual links legality to morality, we could require that individual to rate a series of acts in terms

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23 “Some” because this measure is not relevant to stage 4 reasoners who utilise religion to produce moral reasoning.
of legality and morality (i.e., determine the perceived illegality and perceived immorality of the act for the individual) and then calculate a correlation coefficient across these acts. For this thesis, such a correlation is called a Perceived Illegality-Immorality Correlate (PIC).

PIC scores are an indirect measure of moral reasoning because their production requires no moral reasoning to be post-hoc generated or examined. Thus, the Social Communication Hypothesis predicts that they should not be correlated with liberalism-conservatism. Additionally, PIC scores are a non-ipsative measure of some stage 4 moral reasoning because they measure stage 4 reasoning independently of any other moral reasoning. An individual who predominantly endorses postconventional items can still produce an exceptionally high PIC score. Thus, the Ipsative Hypothesis predicts that PIC scores should not be correlated with liberalism-conservatism because PIC scores are not ipsative and the Ipsative Hypothesis postulates that ipsativity is greatly magnifying very minor differences between liberals and conservatives.

4.5 Validity Criteria for PIC Scores

PIC scores are a measure developed for this thesis. Thus, before they can be used, it is important that some evidence for their validity and statistical appropriateness is established. Because, PIC scores are a new measure, it is not possible to establish clear predictive validity in the precise sense of the term. However, from a conceptual point of view, there are several construct validity predictions that can be made about PIC scores.

However, before this can be done, it needs to be established whether the calculation of PIC scores is statistically appropriate and here there are two main criteria.
Firstly, since a correlation is a measure of how two variables vary together, it is essential that scores on these variables do indeed vary (Howell, 2002). Thus, it is essential that both perceived illegality and perceived immorality show sufficient variability (and internal consistency). Additionally, since PIC scores are designed to be used in correlations themselves (e.g., the correlation between liberalism-conservatism and PIC scores), it is essential that PIC scores vary across individuals. If these two criteria are passed, then PIC scores can be considered statistically appropriate.

In terms of construct validity, several predictions can be made for PIC scores. Because of its underlying basis in stage 4 concepts (see Section 4.4), PIC scores should be higher for individuals who strongly value stage 4 concepts. Thus, an essential validity criterion is that PIC scores should be correlated with stage 4 scores. Additionally, PIC scores should be negatively correlated with anti-authoritarian reasoning because anti-authoritarian moral reasoning bases morality in opposition to the same social systems that stage 4 reasoners endorse.

This raises an important point. Although, stage 4 individuals are expected to produce high PIC scores, it is not inconceivable that individuals with predominantly different moral reasoning may still produce high PIC scores. For instance, an act such as murder may be perceived to be both highly illegal and highly immoral but this does not imply that it is perceived to be highly immoral because it is perceived to be highly illegal. It may be highly immoral because of postconventional reasons (e.g., violates sanctity of human life, breaks social contract) or even personal interests reasons (e.g., you will be imprisoned).
This does not, however, render the PIC problematic for two main reasons. Firstly, acts that are rated in terms of perceived illegality and perceived immorality can be chosen to reduce this possibility. The key is to choose acts where law-transgression could conceivably be supported by non-stage 4 reasoning. Fortunately, Kohlbergian dilemmas were specifically designed to satisfy this criterion because Kohlberg was investigating the changing way children view rules and morality.

Secondly, because of the strong relationship that many stage 4 reasoners believe exists between legality and morality, we would still expect stage 4 reasoners to produce higher correlations in such cases. The illegality is incidental to the immorality for the postconventional or preconventional reasoner but this is not the case for stage 4 reasoners.

This second point leads to further construct validity predictions. For example, even though postconventional reasoning may produce either high or low p scores, because of the central basis in legality in both stage 4 and anti-authoritarian moral reasoning, any relationship between p scores and PIC scores should not be of greater magnitude that the relationships between stage 4 scores and PIC scores and a scores and PIC scores. This also applies to stage 2 and stage 3 reasoning – their correlation with PIC scores should not be stronger than the correlations between PIC scores and both stage 4 scores and a scores.

4.6 Validating a New Liberalism-Conservatism Scale

As noted in Section 2.3, some of the more recent research into the relationship between Kohlbergian moral reasoning (e.g., Emler et al., 1998; Feather, 1988) has
utilised liberalism-conservatism measures that may be outdated. Consequently, it was decided for the purposes of this thesis that a new liberalism-conservatism measure needed to be developed. To this end, a valid measure of liberalism-conservatism should predict voting intentions (cf Barnett et al., 1995; Markoulis, 1989) and self-rated political identity (cf Emler et al., 1983, 1998).

4.7 Experimental Hypotheses

Experimental hypotheses can be grouped according to their aims. Hypotheses regarding the validation of the liberalism-conservatism scale (see Section 4.6) are Hypothesis (1) that the scale is internally consistent; Hypothesis (2) that the scale predicts voting intention and Hypothesis (3) that that scale predicts self-rated political identity.

Hypotheses regarding the statistical appropriateness and validity of PIC scores (see Section 4.5) are Hypothesis (4) that participants’ perceived illegality ratings show variability across acts; Hypothesis (5) the participants’ perceived immorality ratings show variability across acts; Hypothesis (6) that participants’ perceived illegality ratings are internally consistent; Hypothesis (7) that participants’ perceived immorality ratings are internally consistent; Hypothesis (8) that PIC scores show variability; Hypothesis (9) that PIC scores are positively associated with preference for stage 4 moral reasoning; Hypothesis (10) that PIC scores are negatively associated with anti-authoritarian moral reasoning and Hypothesis (11) that any relationship between PIC scores and other forms of moral reasoning (e.g., postconventional, stage 2, stage 3) is not greater in magnitude than the relationships mentioned in Hypotheses (9) and (10).
Hypotheses aiming to replicate previous research (see Section 2.3) are Hypothesis (12) that DIT scores will be internally consistent; Hypothesis (13) liberalism will be positively associated with postconventional moral reasoning and Hypothesis (14) conservatism will be associated with stage 4 moral reasoning.

A Hypothesis testing both the Ipsative Hypothesis and the Social Communication Hypothesis is Hypothesis (15) that PIC scores will not be associated with conservatism.

Hypotheses testing the Breadth of Reasoning Hypothesis (see Section 4.2) are Hypothesis (16) that stage 2 and 3 reasoning will be associated with liberalism and Hypothesis (17) that lack of breadth in moral reasoning will be associated with conservatism.

**Method**

*Design*

The study adopted a passive-observational design where individuals’ moral reasoning – both directly and indirectly measured – was the dependent variable and liberalism-conservatism was the predictor variable.

*Participants*

The sample consisted of 148 first year psychology students (62% female) from the University of Sydney who participated as part of their first year psychology course. The gender ratio reflects that of the first year psychology student population. Participants’ ages ranged from 17-27 years with a $M=19.09$ years where $SD=1.69$ years.
Females had a $M=19.05$ years with $SD=1.74$ years whilst males had a $M=19.18$ years with $SD=1.41$ years.

As recommended by Rest, Narvaez, Thoma and Bebeau (1999c), the DIT-2 method of checking for participant reliability was used (even though we used DIT-1). This procedure is designed to eliminate respondents who fail to answer the DIT in the manner in which it is designed. Rest et al. (1999c) recommend this method because it appears to result in the DIT having overall improved psychometric properties whilst simultaneously decreasing the number of purged participants (compared to the original DIT-1 reliability checks).

As a result, thirteen participants were removed from the analysis (for details see Appendix A). Analyses were thus performed on the remaining 135 participants. Any variance in reported degrees of freedom are due to incomplete answering by respondents.

**Materials**

There were three main questionnaires; full versions of these are present in Appendix A.

(1) The political questionnaire, designed to measure liberalism-conservatism, contained a series of items asking participants how they felt about 42 political issues on a 5-point Likert scale (strongly disagree=1, disagree=2, neutral=3, agree=4, strongly agree=5).

These issues spanned several areas including attitudes to crime (e.g., death penalty), economic policy (e.g., unemployment benefits), social policy (e.g., multiculturalism) and government institutions (e.g., Australia as a monarchy). Some of
these items originated from Henningham’s (1996, 1997) and Collins and Hayes’ (1993) measures. Other items were created from current (as of the year 2000) Australian news issues or developed from philosophic and psychological conceptions of liberalism and conservativism (see section 1.7). Thus, our questionnaire was based on issues more relevant to modern political distinction but still was designed to capture the essential qualities of the liberal-conservative distinction.

Half of these items were worded in the liberal direction (e.g., euthanasia) and half were worded in the conservative direction (e.g., banning x-rated videos). It was decided to score the questionnaire in the conservative direction (i.e., higher scores indicate more conservatism) because several researchers (e.g., Collins & Hayes, 1993; Henningham, 1996, 1997; Wilson & Patterson, 1968) had scored their questionnaires in this direction consistent with the idea, mentioned in section 1.7, of treating conservatism as a personality variable. As a result, all items written in the liberal direction were reverse scored. The political score was the average of all of the items.

As noted in Section 4.6, there is a need to validate this questionnaire. Fortunately, we had basic findings on some of the items from Henningham (1996, 1997), Collins and Hayes (1993) and Maltby (1997; who had analysed the concurrent validity of Hennigham’s, 1996 measure). Nevertheless, we had no validity findings for the whole test. Thus, as suggested by Section 4.6, a measure of voting intention and a measure of self-rated liberalism-conservatism were also included.

The voting intention measure required participants to rank six major Australian political parties (Democrat, Green, Labor, Liberal, National, One Nation) according to
how left or right wing they were and to indicate both which of these parties they were most likely to vote for and which of them they would consider voting for.

The measure of self-rated liberalism-conservatism required participants to indicate how left or right wing they believed they were on an 11-point rating scale (0=very left wing, 10=very right wing). We note that such an approach to measuring political orientation had been previously used by other researchers in the field (e.g., Barnett et al., 1995; Emler et al., 1998).

Along with these tasks, participants were given brief, textbook descriptions of left and right wing, which included comments that liberalism is sometimes associated with the left and conservatism is sometimes associated with the right.

(2) The second questionnaire used was the Defining Issues Test (DIT; Rest et al., 1974; see also Rest et al. 1999a). As reviewed in Section 1.6, this questionnaire measures preference for different styles of moral reasoning such as postconventional moral reasoning, anti-authoritarian moral reasoning and stages 2, 3 and 4 from Kohlberg’s hierarchy. As noted in Section 1.6, the DIT typically has a reliability coefficient in the 0.70s and has met a variety of validity criteria.

(3) The final questionnaire was the PIC questionnaire. For each DIT dilemma, four questions were presented that evaluated how illegal participants perceived the “illegal” action choice from that dilemma (e.g., how illegal it would be for Heinz to steal the drug). These items (see Table 4.1) attempted to measure different facets of illegality – legislative illegality for item 1, judicial punishment (item 3), global illegality (item 6) and the attitude of legal enforcers as to the necessity of dealing with this type of legal breach
(item 7). All these items (and the perceived immorality items discussed below) were scored on an eleven point scale as shown in Table 4.1.

In addition, for each dilemma, four questions evaluated how moral/immoral this same action choice would be. Parallel to the perceived illegality items, these items attempted to measure different facets of immorality. These included the areas of how one teaches morals (item 2), just treatment (item 4), global immorality (item 5) and moral ideals (item 7).

For each subject, these items were used to calculate perceived illegality and perceived immorality score for each dilemma by converting item scores to a 0-10 scale (where higher scores indicate greater illegality or immorality – depending on whether the item is a perceived illegality or a perceived immorality item). Depending on which score was being calculated, all the perceived illegality or perceived immorality items for that dilemma were then averaged. Thus, each respondent produced a perceived illegality score and a perceived immorality score for the Heinz and the Drug dilemma. Each participant also produced a perceived illegality score and perceived immorality score for the Escaped Prisoner dilemma and so on for all the other DIT dilemmas.

These perceived illegality and perceived immorality scores were used to produce a perceived illegality-immorality correlate (PIC) score for each participant. Note that this correlation is not a correlation across the subject pool as is often calculated in psychological research. Rather, each person produces their own correlation coefficient that indicates the extent to which they correlate the illegality of an action with that action’s immorality (see Section 4.4). For each participant, perceived illegality and
Table 4.1

*Form of Perceived Illegality and Perceived Immorality Items Used in Study 1*

<table>
<thead>
<tr>
<th>Item</th>
<th>Question</th>
<th>Item Type</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>How do lawmakers feel about this action when they draft laws?</td>
<td>Illegal</td>
<td>0 – 10&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>2</td>
<td>How would you direct children about this action to raise them to be very moral individuals?</td>
<td>Immoral</td>
<td>0 - 10</td>
</tr>
<tr>
<td>3</td>
<td>How severely would a court punish this action if the individual was found guilty?</td>
<td>Illegal</td>
<td>0 - 10</td>
</tr>
<tr>
<td>4</td>
<td>How should society deal with individuals who perform this action?</td>
<td>Immoral</td>
<td>0 – 10&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>5</td>
<td>How right or wrong is this action?</td>
<td>Immoral</td>
<td>-5 - 5&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>6</td>
<td>How severe a violation of the law is this action?</td>
<td>Illegal</td>
<td>0 - 10</td>
</tr>
<tr>
<td>7</td>
<td>How likely is it that this action will be prosecuted to the full extent of the law?</td>
<td>Illegal</td>
<td>0 - 10&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>8</td>
<td>How ideal behaviour is this action?</td>
<td>Immoral</td>
<td>-5 - 5</td>
</tr>
</tbody>
</table>

Note. All items used an 11-point rating scale but the exact numbers vary (see Scale column). These 8 items were repeated for each of the 6 dilemmas (with the action changing with the dilemma).

<sup>a</sup> These items were worded such that a high score would indicate a less illegal or less immoral response.
perceived immorality scores are paired according to dilemma – e.g., Heinz and the Drug perceived illegality scored is paired with Heinz and the Drug perceived immorality score.

Then, a correlation between these perceived illegality and perceived immorality scores is calculated across the 6 DIT dilemmas. This correlational approach was taken because a correlation is a summary of the relationship between two variables (Cronbach, 1960).

Procedure

A notice allowing participants to sign up for this experiment was placed on a Department of Psychology noticeboard in the University of Sydney along with similar notices for any other experiments running at the time. On the notice/sign-up sheet, under experimental description was written. “Participants will be required to answer a series of questions on political and social issues. They will be required to indicate whether or not they support given positions and evaluate certain features of given hypothetical situations.”

Participants completed the questionnaires in groups with an average size of 5 individuals (group size varied from 2 to 10) in a room in the psychology department of the University of Sydney. All tests were administered in paper and pencil format. On the very rare occasion a term was not understood, the experimenter gave a dictionary definition – this happened three times throughout the experiment. The experiment took between 45 minutes and 1 hour to complete.
When participants had finished one questionnaire, they waited until all individuals in their experimental session had finished answering that questionnaire before receiving the next questionnaire. When all individuals in the session had completed all questionnaires, participants were debriefed.

Counterbalancing

The following variables were counterbalanced across participants: 1) whether they answered the political questionnaire or moral questionnaires (i.e., the DIT and the illegality-immorality questionnaires) first; 2) whether, amongst the moral questions, they answered the DIT or the illegality-immorality questionnaire first and 3) whether, for both the DIT and illegality-immorality questionnaire, the dilemmas were presented in the order that they usually appear in the DIT or in a reversed order.

Results

Scoring of Voting Intention Measure

Based on participant rankings, the parties were ordered in terms of liberalism-conservatism. This was done via modal categories. Unfortunately, this left three parties in a tie (though the others were all independently differentiated). This tie was broken by examining the number of scores to the left of the tie category. The rankings are provided

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24 Participants were gathered over a four-week period. Thus, four such notices were used. They were all identical.
in Table 4.2 where the parties have been ordered from most left to most right (as perceived by participants) when the table is examined from top to bottom.

Voting intention was scored via examination of the party a participant was most likely to vote and the parties a participant would consider voting for. If a person indicated that they were most likely to vote for the Green Party (adjudged to be the most left wing) they received a score of 0. They received a score of 1 for the next most left wing party (the Labor Party) and so on up to a score of 5 for the One Nation party (judged to be the most right wing). The same scoring system (Green=0 Labor=1 etc.) was employed for the consideration responses.

Thus, if a person indicated that they were most likely to vote for the Labor party, this would score a 1 (Labor being the 2nd most left wing party). If they indicated that they would only consider voting for either the Labor or Liberal parties, this would score a 2.5 because the Labor consideration was 1, the Liberal consideration was 4 (Liberal being the 2nd most right wing party) and the average of 1 and 4 is 2.5.

A person’s voting intention score is the average of the “likely to vote” and “considering to vote” scores. For the example in the above paragraph, this would mean an averaging of 1 and 2.5 respectively – meaning a voting intention score of 1.75. This dual intention/consideration approach is valuable because it is a more accurate measure when supporters of a party vary within themselves.

Validating the Liberalism-Conservatism Measure

The political scale had never been used before (although some items were used in previous scales). Thus, we examined it to attempt to identify any faulty items before we
Table 4.2

*Rankings of Australian Political Parties*

<table>
<thead>
<tr>
<th>Party</th>
<th>ML</th>
<th>2nd ML</th>
<th>3rd ML</th>
<th>3rd MC</th>
<th>2nd MC</th>
<th>MC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>35</td>
<td>28</td>
<td>18</td>
<td>15</td>
<td>21</td>
<td>14</td>
</tr>
<tr>
<td>Labor</td>
<td>24</td>
<td>28</td>
<td>32</td>
<td>20</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>Democrat</td>
<td>9</td>
<td>30</td>
<td>42</td>
<td>17</td>
<td>24</td>
<td>9</td>
</tr>
<tr>
<td>National</td>
<td>3</td>
<td>20</td>
<td>40</td>
<td>35</td>
<td>26</td>
<td>7</td>
</tr>
<tr>
<td>Liberal</td>
<td>24</td>
<td>16</td>
<td>20</td>
<td>30</td>
<td>25</td>
<td>16</td>
</tr>
<tr>
<td>ON</td>
<td>24</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>14</td>
<td>63</td>
</tr>
</tbody>
</table>

Note. ON=One Nation; ML=most liberal; MC=most conservative. The values represent absolute numbers. Modal categories have been put in bold. Ranking by modal categories thus created a three-way tie. This was resolved by determining the total number of responses to the left of the modal categories (e.g., 52 [24+28] for the Labor party) where a higher number of such responses meant more liberal.
proceeded to use it in any analyses. Six items were found not to significantly load on the total \( ps>0.05 \) and were deleted from the scale. Thus, the political scale was calculated by averaging the remaining 36 items. The deleted items are listed in Appendix A.

To test the internal consistency of the scale (Hypothesis 1), Cronbach's Alpha was calculated and a value of \( \alpha=0.83 \) was obtained. To test Hypothesis 2, the correlation between political scores and voting intention was calculated and found to be significant in the positive direction \( (r(135)=0.36; \ p<0.001) \). Additionally, to test Hypothesis 3, the correlation between political scores and self-rated liberalism was calculated and again was found to be significant in the positive direction \( (r(135)=0.34; \ p<0.001) \). Thus, these three hypotheses were supported.

*Validating PIC Scores*

Hypotheses 4 and 5 were examined by a Repeated Measures One-Way Anova, performed on the perceived illegality scores and perceived immorality scores respectively. It was found that different dilemmas produced both significantly different perceived illegality scores (Greenhouse-Geisser corrected \( F(4.510,\ 604.387) =114.796; \ p<0.001 \)) and significantly different perceived immorality scores (Greenhouse-Geisser corrected \( F(4.281,\ 573.639) =62.787; \ p<0.001 \)). Consequently, both of these hypotheses were supported.

Hypotheses 6 and 7 were examined via calculation of Cronbach's Alpha for the perceived illegality and perceived immorality items respectively. Cronbach’s Alpha was \( \alpha=0.69 \) for the perceived immorality items (24 items) and \( \alpha=0.64 \) for the perceived
illegal items (24 items). While these do not quite reach the 0.70 benchmark, they are not greatly distant from it and thus give partial support to hypotheses 6 and 7.

Hypothesis 8 was examined via examination of PIC score descriptive statistics. Descriptive statistics for variables utilised in this experiment are presented in Table 4.3, which reveals that, for PIC scores, $M=0.20$ and $SD=0.46$. Considering the scale range of PIC scores is a minimum of -1 to a maximum of 1 (PIC scores being a correlation), this suggests that PIC scores have typical variability for a continuous variable (Howell, 1997) and thus Hypothesis 8 is supported.

Table 4.4 presents the correlation matrix of the main measures utilised in this experiment. Hypotheses 9 and 10 predicted correlations between PIC scores and stage 4 scores and a scores respectively. PIC scores were significantly positively correlated with stage 4 scores ($r(135)=0.23; p<0.01$) and significantly negatively correlated with a scores ($r(135)=-0.22; p<0.05$). To examine Hypothesis 11, correlations between PIC scores and both p scores and PIC scores and stage 2+3 scores were calculated. PIC scores were not significantly correlated with p scores ($r(135)=0.13; p>0.1$) nor stage 2+3 scores ($r(135)=0.01; p>0.9$). Thus, these three hypotheses were all supported.

*Replicating Previous Research*

To test Hypothesis 12, Cronbach’s Alpha was calculated for p scores and found to be $\alpha=0.62$. Hypothesis 13 predicted that p scores would be significantly negatively correlated with political scores$^{25}$ and this was the case ($r(135)=-0.50; p<0.001$).

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$^{25}$ The political score being scored in the conservative direction.
Table 4.3

**Study 1 Summary Statistics of Moral Reasoning and Liberalism-Conservatism Measures**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Mean</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Scale Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&lt;sup&gt;1&lt;/sup&gt;</td>
<td>2.61</td>
<td>2.49</td>
<td>0</td>
<td>13</td>
<td>0 - 33.3</td>
</tr>
<tr>
<td>P&lt;sup&gt;2&lt;/sup&gt;</td>
<td>33.95</td>
<td>13.35</td>
<td>3.33</td>
<td>70</td>
<td>0 - 95</td>
</tr>
<tr>
<td>PIC&lt;sup&gt;3&lt;/sup&gt;</td>
<td>0.20</td>
<td>0.46</td>
<td>-.090</td>
<td>0.97</td>
<td>-1 - 1</td>
</tr>
<tr>
<td>Political&lt;sup&gt;4&lt;/sup&gt;</td>
<td>99.23</td>
<td>16.23</td>
<td>59</td>
<td>143</td>
<td>36 - 180</td>
</tr>
<tr>
<td>Stage 2+3&lt;sup&gt;5&lt;/sup&gt;</td>
<td>14.69</td>
<td>6.23</td>
<td>1</td>
<td>30</td>
<td>0 - 96.7</td>
</tr>
<tr>
<td>Stage 4&lt;sup&gt;6&lt;/sup&gt;</td>
<td>32.22</td>
<td>12.75</td>
<td>3.33</td>
<td>61.7</td>
<td>0 - 90</td>
</tr>
</tbody>
</table>

Note. A, P, Stage 2+3 and Stage 4 scores are all calculated from the DIT.

<sup>1</sup> A scores measure preference for anti-authoritarian moral reasoning.

<sup>2</sup> P scores measure preference for postconventional moral reasoning.

<sup>3</sup> PIC scores measure the degree to which an individual correlates the illegality and the immorality of an act.

<sup>4</sup> Political scores measure liberalism-conservatism scored in the conservative direction.

<sup>5</sup> Stage 2+3 scores measure combined preference for stage 2 and stage 3 moral reasoning.

<sup>6</sup> Stage 4 scores measure preference for stage 4 moral reasoning.
Table 4.4

Study 1 Correlations Between Moral Reasoning and Liberalism-Conservatism Measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>P²</th>
<th>PIC³</th>
<th>Political⁴</th>
<th>Stage 2+3⁵</th>
<th>Stage 4⁶</th>
</tr>
</thead>
<tbody>
<tr>
<td>A¹</td>
<td>.00</td>
<td>-.22*</td>
<td>-.14</td>
<td>.02</td>
<td>-.38***</td>
</tr>
<tr>
<td>P²</td>
<td></td>
<td>-.13</td>
<td>-.50***</td>
<td>-.53***</td>
<td>-.58***</td>
</tr>
<tr>
<td>PIC³</td>
<td></td>
<td></td>
<td>.33**</td>
<td>.01</td>
<td>.23**</td>
</tr>
<tr>
<td>Political⁴</td>
<td></td>
<td></td>
<td></td>
<td>.09</td>
<td>.49***</td>
</tr>
<tr>
<td>Stage 2+3⁵</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.25**</td>
</tr>
</tbody>
</table>

Note. A, P, Stage 2+3 and Stage 4 scores are all calculated from the DIT.

¹ A scores measure preference for anti-authoritarian moral reasoning.

² P scores measure preference for postconventional moral reasoning.

³ PIC scores measure the degree to which an individual correlates the illegality and the immorality of an act.

⁴ Political scores measure liberalism-conservatism (scored in conservative direction).

⁵ Stage 2+3 scores measure combined preference for stage 2 and stage 3 moral reasoning.

⁶ Stage 4 score measure preference for stage 4 moral reasoning.

* p<0.05; ** p<0.01; *** p<0.001
Additionally, Hypothesis 14 predicted that stage 4 scores would be significantly positively correlated with political scores and again this prediction was supported ($r(135)=0.49; p<0.001$).

**Testing the Ipsative and the Social Communication Hypotheses**

In opposition to Hypothesis 15, as indicated in Table 4.4, PIC scores were significantly positively correlated with political scores ($r(135)=0.33; p<0.001$).

**Testing the Breadth of Reasoning Hypothesis**

Hypothesis 16 predicted correlations between political scores and both stage 2+3 scores and a scores. As presented in Table 4.4, in opposition to this hypothesis, political scores were not associated with stage 2+3 scores ($r(135)=0.09; p>0.2$) nor a scores ($r(135)=-.14; p>0.1$). Additionally, in opposition to Hypothesis 17, the correlation between c scores and conservatism was not significant ($r(135)=-.07; p>0.3$).

**Post-Hoc Analysis**

The data in Table 4.3 indicated that the p scores in this study might have been lower than typical university norms. For instance, the DIT manual (Centre for the Study of Ethical Development, 1990) gives three sets of norming figures for undergraduates – these are $M=42.3; SD=13.2$, $M=44.1; SD=12.2$ and $M=45.9; SD=12.2$. The last two of these, however, appear to come from the same sample - the $M=44.1; SD=12.2$ figure is for males whilst the $M=45.9; SD=12.2$ figure is for females. A one-sample t-test comparing the present sample ($M=33.95; SD=13.35$) to the lowest of these norms (i.e.,
42.3) found that our sample produced significantly lower p scores ($t(134)=-7.268$, $p<0.001$).

This observation is not surprising because Wimalasiri (2001) had also found that p scores were lower in Australians compared to their US peers. This however is not of great concern (in regard to interpretation of these results) because Wimalasiri (2001) had found that factors such as age, education and religious belief affected the moral reasoning of his Australian sample in a comparable way to their effect on the samples from other countries. Given that age and education are considered important validity criteria, this suggests that however the moral reasoning of Australian and US university students may differ (an issue which is beyond the scope of this thesis), it does not appear to affect the validity of the DIT.

**Discussion**

*Validating the Political Questionnaire*

Because the PIC questionnaire and the political questionnaire were new, it was important to establish their validity before utilising them. Evidence was found for the construct validity of each of these scales.

Hypothesis 1 predicted that the political questionnaire would demonstrate internal consistency. This hypothesis was supported by the observation that Cronbach’s Alpha for the scale was above $\alpha=0.80$. Hypotheses 2 and 3 were that political questionnaire would predict voting intentions and self-rated liberalism-conservatism and were supported by the medium-sized correlations (see Cohen, 1992) between the political
questionnaire and both these measures. Thus, having satisfied the three validity hypotheses set for it, the political questionnaire appears to be a suitable instrument to use for the purpose of measuring an individual’s liberalism-conservatism.

Validating PIC Scores

Several hypotheses concerned the establishment of PIC scores as both statistically appropriate and valid. Because PIC scores are calculated as a correlation across two variables, several hypotheses examined the psychometric nature of these underlying variables. Hypotheses 4 and 5 were supported demonstrating that the calculation of PIC scores was statistically appropriate. Hypotheses 6 and 7 postulated that perceived illegality and perceived immorality ratings needed to be consistent. While they did not reach the $\alpha=0.70$ value recommended for basic research (Aiken, 1997; Walsh & Betz, 1995) they were quite close to it. There are also some technical complications with using Cronbach’s Alpha to assess reliability for the PIC score (which are discussed in Appendix A). In support of Hypothesis 8, PIC scores produced a standard deviation of about 1/5th of the scale range, which is a typical value according to Howell (1997). Together, the support for hypotheses 4-7 establishes that it is statistically appropriate to calculate PIC scores whilst the support for hypothesis 8 established that PIC scores are useable for correlational analyses.

Hypotheses 9-11 aimed to establish that these correlations, i.e., PIC scores, were an appropriately valid measure of the degree to which an individual correlated the illegality and immorality of an act. Supporting Hypotheses 9-10 respectively, PIC scores were positively associated with stage 4 reasoning and negatively associated with anti-
authoritarian reasoning. Finally, Hypothesis 11 was supported by the finding that correlations between PIC scores and both p scores and stage 2+3 scores were between the values of the correlations between PIC scores and both stage 4 scores and a scores – the relationship between PIC scores is strongest for those moral reasoning types that are most intimately related to PIC scores (i.e., stage 4 and anti-authoritarian moral reasoning; see Section 4.5). Thus, having satisfied all the validity criteria set for them, PIC scores appear to be demonstrating at least some degree of construct validity.

Replicating Previous Research

As predicted by Hypothesis 12, DIT scores showed a reliability value of $\alpha=0.62$ which approaches the $\alpha=0.70$ level recommended for basic research (Aiken, 1997; Walsh & Betz, 1995). Rest, Thoma, Narvaez and Bebeau (1997b), however, reported Cronbach’s Alpha as high as $\alpha=0.78$ for the DIT although they used a composite sample consisting of approximately even numbers of junior high school, senior high school, college and graduate students (see Rest et al., 1997a, 1997b). Hence, the possibility of a restriction of range effect (Fidell & Tabachnick, 2003) in our data arises. This existence of a restriction of range effect is supported by the observation that, for the composite sample, the standard deviation of the p score was 17.6 (Rest et al., 1997a) but, for the sample in Study 1, the standard deviation of the p score was 13.35.

As predicted by Hypotheses 14 and 15, liberalism (as operationalised by low political scores) was associated with postconventional reasoning while conservatism (as operationalised by high political scores) was associated with stage 4 moral reasoning. Thus, the findings (see Section 2.3; e.g., Barnett et al., 1995; Emler et al., 1998; Feather,
of a correlational relationship between Kohlbergian moral reasoning and liberalism-conservatism have been replicated.

**PIC Score Implications for the Ipsative Hypothesis**

The most important finding of this experiment was that conservatives appear to correlate the perceived illegality and perceived immorality of an act significantly more than liberals. Hypothesis 15, which was postulated by both the Ipsative Hypothesis and the Social Communication Hypothesis predicted no such correlation. Thus, the conservative approach to morality is firmly rooted in stage 4 concepts (or at least the critical stage 4 concept of legality). This finding extends previous findings (see Section 2.3; e.g., Barnett et al., 1995; Emler et al., 1998; Feather, 1988; Fishkin et al., 1973) of a link between stage 4 reasoning and conservatism because, unlike these studies, an indirect measure of moral reasoning was employed. No requirement to justify, explain, deliberate on or otherwise consider the factors behind their moral judgements is necessary when answering the PIC questionnaire. We can simply comment that, on the average, the more illegal a conservative perceives an act to be, the more immoral they will evaluate it to be.

Firstly, these findings are not consistent with the Ipsative Hypothesis. This viewpoint argues that the forced choice nature of the DIT (and especially MJI) greatly amplifies the relationship between moral reasoning and liberalism-conservatism. However, PIC scores are not ipsative but still exhibit a significant, medium-sized (see Cohen, 1992) correlation with conservatism. It should additionally be noted that this correlation is not significantly different to the correlation between stage 4 scores and
liberalism-conservatism ($z=1.70, p>0.05$). (This $z$-test, an extension of Dunn and Clark’s (1969) work on the Fisher $z$-transformation, is recommended by Meng, Rosenthal and Rubin (1992) who argue that it is a more valid test than Hotelling’s $t$-test.) This is despite the fact that stage 4 moral reasoning also typically encompasses religious moral reasoning (unlike PIC scores) and religiosity is often associated with conservatism (Collins & Hayes, 1993; Hennigham, 1996). Thus, our findings argue strongly against the idea that ipsativity is the cause of the relationship between Kohlbergian moral reasoning and liberalism-conservatism.

**PIC Score Implications for the Social Communication Hypothesis**

The correlation between PIC scores and liberalism-conservatism is also evidence against Emler et al.’s (1983, 1998) Social Communication Hypothesis. Recall that Emler et al. (1983) argued that conservatives found stage 5 moral reasoning to resemble that of liberals and thus avoided using it. This rejection was not based on the rejections of concepts such as utility and the social contract but merely the appearance of stage 5 moral reasoning as politically liberal. Likewise, Emler et al. (1998) argued that liberals endorsed post-conventional responses because they found stage 4 arguments to be typically conservative and thus avoided using them.

The Social Communication hypothesis can explain similar findings utilising moral reasoning production tasks such as the MJI (e.g., Fishkin, et al., 1973; Fontana & Noel, 1973) and moral reasoning preference tasks such as the DIT (e.g., Barnett et al., 1995; Rest et al., 1997a) but it cannot incorporate similar findings with PIC scores. The reason for this is that PIC scores are an indirect moral reasoning task (see Sections 4.3 and 4.4).
Moral preference and moral production measures respectively rely on evaluation and production of moral reasoning and the Social Communication postulates that these actions result in individuals trying to post-hoc justify their moral judgements. However, the PIC is an indirect measure where individuals are not required to present their moral reasoning nor to indicate what moral reasoning has value. Hence, according to the Social Communication Hypothesis, there is no opportunity for post-hoc justification because moral reasoning has not been introduced.

Thus, according to the Social Communication Hypothesis, the moral reasoning (indirectly) measured by PIC scores is that which is present in individuals before they justify their moral judgements in a post-hoc manner. The hypothesis predicts that, in such a circumstance, liberals and conservatives should not differ because it postulates (e.g., Emler et al., 1983, 1998) that there is in essence no real difference in the actual moral reasoning of liberals and conservatives – the difference is in the items endorsed on (direct) moral reasoning measures. Consequently, the finding of a correlation between PIC scores and liberalism-conservatism appears to suggest that the moral reasoning differences between liberals and conservatives occurs via a different mechanism than that proposed by the Social Communication Hypothesis.

Implications for the Breadth of Reasoning Hypothesis

There were two hypotheses concerning the Breadth of Reasoning Hypothesis. Hypothesis 16 predicted that both stages 2 and 3 and anti-authoritarian moral reasoning would be correlated with liberalism-conservatism. However, neither stage 2+3 nor a scores were significantly correlated with liberalism-conservatism. Additionally,
Hypothesis 16 predicted that DIT c scores would be correlated with liberalism-conservatism but no significant correlation was found. Thus, as a result of these findings, neither prediction of the Breadth of Reasoning Hypothesis was supported suggesting that liberals do not use a greater variety of moral reasoning than conservatives. Thus, the Breadth of Reasoning Hypothesis has not been supported by Study 1.

Conclusions From Study 1

Study 1 utilised PIC scores as an indirect non-ipsative measure of some stage 4 moral reasoning to investigate the relationship between stage 4 moral reasoning and conservatism. PIC scores were significantly correlated with conservatism indicating that the apparent moral reasoning differences between liberals and conservatives are not merely caused by liberals and conservatives endorsing different items on moral reasoning tasks such as the DIT. Conservatives are genuinely more concerned with the concept of legality when dealing with moral considerations. This finding is not consistent with either the Ipsative Hypothesis or the Social Communication Hypothesis. Additionally, Study 1 found evidence against the central tenet of the Breadth of Reasoning Hypothesis, namely that liberals use a wider variety of moral reasoning than conservatives.

Study 2 aimed to continue the systematic testing of these hypotheses by further examining the effect of the use of the DIT as a measure of moral reasoning via examination of correlations between liberalism-conservatism and moral reasoning when non-DIT measures are utilised. The Importance Hypothesis argues that the reason liberals and conservatives differ on moral reasoning tasks is that tasks such as the MJL and DIT utilise dilemmas involving liberal issues to a greater extent than conservative
issues. Study 2 will also aim to increase the reliability of the perceived illegality and perceived immorality items that are required for calculation of PIC scores.
Chapter 5

Study 2

Reversing the DIT Dilemma Bias

5.1 Introduction

Of the key objectives of Study 1 was to examine whether moral reasoning tasks measure the moral reasoning utilised by individuals to generate moral judgements or whether they merely measured moral reasoning consistent with these moral judgements as per Emler et al.’s (1983, 1998) Social Communication Hypothesis (see also Section 3.4). The results, in particular the observed positive correlation between PIC scores and political scores, indicated that moral reasoning tasks do not appear to measure moral reasoning that has been generated/endorsed post-hoc to justify moral judgements.

However, despite this finding, it is still entirely possible that the correlations between instruments such as the DIT and the MJI with liberalism-conservatism are caused by Kohlbergian instruments rather than by genuine moral reasoning differences between liberals and conservatives. One of the key features of many Kohlbergian moral reasoning measures (see Section 1.9) including the DIT (Rest et al., 1974), MJI (Colby et al., 1987), the MJT (Lind, 1995) and the SRM (Gibbs et al., 1992) is the use of moral dilemmas. However, as noted in section 3.7, the issues used in such dilemmas often are issues that are important to liberals. Study 2 aims to investigate the effect of this by
employing a DIT with conservative issues. This will be utilised to examine predictions of the Importance Hypothesis and the Social Communication Hypothesis.

5.2 The Dilemma Bias and the Importance Hypothesis

As argued in Section 3.7, the majority of DIT dilemmas appear to be concerned with issues that were important for liberalism. This may have arisen because of Kohlberg’s (e.g., 1981) liberal leanings, it may have been a product of the type of issues that were prominent when the DIT was constructed or it may have been due to other unknown factors. In any case, this has the potential to cause complications in analysing the effects of politics and moral reasoning on each other because the DIT is now politically biased in terms of content. Whether this means that the DIT is politically biased as a measure of moral reasoning is, however, another question.

The Importance Hypothesis argues that the correlation between liberalism and postconventional moral reasoning is because of this dilemma bias. The hypothesis argues the correlations that are observed between liberalism-conservatism and Kohlbergian moral reasoning (see Section 2.3; e.g., Barnett et al., 1995; Emler et al., 1998; Fishkin et al., 1973), while indicative of true differences in moral reasoning as opposed to mere differences in item endorsement (see Section 2.5), are only half of the story. The hypothesis accepts that, for the DIT dilemmas, liberals are reasoning in a more advanced manner than conservatives (as per the Sophistication Hypothesis; see Section 3.2). However, this is because the DIT dilemmas involve issues that are important to liberals.

While not the only logical possibility, one mechanism for the Importance Hypothesis is that merely talking about moral issues results in increased p scores (cf
Schaefli et al., 1985). The key here is that liberals produce higher p scores not because of some feature of liberalism but because DIT dilemmas are the type of issues that they choose to talk about.

### 5.3 Reversing the Dilemma Bias to Test the Importance Hypothesis

Study 2 aims to test the Importance Hypothesis by reversing the direction of the dilemma bias such that a conservative dilemma bias occurs. Because the Importance Hypothesis predicts that the dilemma bias is responsible for the correlations between liberalism-conservatism and Kohlbergian moral reasoning (via the importance of issues), it also predicts that reversing the dilemma bias should reverse the correlation such that conservatism would now be correlated with postconventional reasoning and liberalism would be correlated with stage 4 reasoning (cf Sparks & Durkin, 1987). However, as noted in Chapter 2, it is possible that multiple effects cause the correlation between liberalism and postconventional reasoning. Thus, a change in the magnitude of the correlation would be an indication that the Social Communication Hypothesis and/or the Importance Hypothesis has some effect but that other factors are involved.

A direct way to reverse the dilemma bias is to create a Conservative Defining Issues Test (DIT-CON). This would be a test identical to the DIT in form but which utilises dilemmas involving issues that are important to conservatives. For such a test, the Importance Hypothesis would predict that conservatives should reason in a more advanced manner than liberals, because the issues are more important to them, and

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26 DIT-CON is preferable to CDIT to avoid any potential confusion with the DIT C score.
consequently produce higher p scores. Thus, the correlation between liberalism-conservatism and p scores would be significantly different to that observed in Study 1 (because liberals produced higher p scores in Study 1).

5.4 Using the DIT-CON to Test the Social Communication Hypothesis

The reversal of the dilemma bias in the DIT-CON also allows another test of the Social Communication Hypothesis. Study 1 did not find evidence for the Social Communication Hypothesis but there is no reason not to test it under different circumstances and the construction of the DIT-CON provides a good opportunity. As described in Section 3.4, the Social Communication Hypothesis (e.g., Emler, 1983; Emler et al, 1983, 1998) states that one’s moral judgements are essentially dictated by one’s liberalism-conservatism and, moreover, that what is measured by moral reasoning is merely post-hoc searching to find politically suitable moral reasoning to justify one’s moral judgements.

However, this relies on the fact that liberals find postconventional arguments consistent with their moral judgements and conservatives find stage 4 arguments consistent with their moral judgements (Emler et al. 1983, 1998). Hence, if dilemmas were used such that conservatives found that postconventional reasoning was consistent with their moral judgements and liberals found that stage 4 reasoning was consistent with their moral judgements, the Social Communication Hypothesis would predict that conservatives would use more postconventional reasoning and liberals would use more stage 4 reasoning. Consequently, when reversing the DIT dilemma bias to produce the DIT-CON, dilemmas should be designed such that “conservative moral judgements” will
lead to the rejection of stage 4 reasoning but the acceptance of postconventional reasoning.

5.5 The Item Endorsement Issue Revisited

As described in Section 2.5, one limitation with any preference-based measure of moral reasoning is the possibility that individuals are merely endorsing moral reasoning items according to some criteria other than the fact that they are utilising that moral reasoning. This issue formed the basis of Study 1 where PIC scores were used to investigate this issue. Although the DIT-CON is designed to be only different from the DIT in terms of political dilemma bias, it is perhaps prudent to include PIC scores to allow examination of this issue for DIT-CON dilemmas.

5.6 Hypotheses

Hypotheses involving the DIT-CON PIC questionnaire are Hypothesis (1) that participants’ perceived illegality ratings show variability; Hypothesis (2) the participants’ perceived immorality ratings show variability; Hypothesis (3) that participants’ perceived illegality ratings are internally consistent; Hypothesis (4) that participants’ perceived immorality ratings are internally consistent; Hypothesis (5) that DIT-CON PIC scores show variability; Hypothesis (6) that DIT-CON PIC scores are positively associated with preference for stage 4 moral reasoning; Hypothesis (7) that DIT-CON PIC scores are negatively associated with anti-authoritarian moral reasoning; Hypothesis (8) that any relationship between DIT-CON PIC scores and other forms of moral reasoning (e.g., postconventional, stage 2, stage 3) is not greater in magnitude than the relationship
mentioned in Hypotheses (6) and (7) and Hypothesis (9) that PIC scores are correlated with conservatism.

Hypotheses involving the DIT-CON are Hypothesis (10) that DIT-CON scores will show internal consistency; Hypothesis (11) that, as predicted by both the Importance Hypothesis and the Social Communication Hypothesis, DIT-CON p scores will be associated with conservatism; Hypothesis (12) that, as predicted by both the Importance Hypothesis and the Social Communication Hypothesis, DIT-CON stage 4 scores will be associated with liberalism.

Note that no specific hypotheses were formulated regarding the validation of the political questionnaire. This was because this questionnaire was unchanged from Study 1 where it had been validated. By contrast, validity hypotheses for the DIT-CON and the DIT-CON PIC questions (described above) were formulated because the content of these tests was different to their Study 1 counterparts.

**Method**

*Design*

The study adopted a passive-observational design where individuals’ moral reasoning – both directly and indirectly measured – was the dependent variable and liberalism-conservatism was the predictor variable.

*Participants*

The sample consisted of 153 first year psychology students (73% female) who participated as part of their first year psychology course. The gender ratio is not atypical.
of first year psychology students. Participant age ranged from 17-44 years with a $M=19.24$ years with $SD=2.93$ years. Males had a $M=19.49$ years with $SD=4.43$ years whilst females had a $M=19.17$ years with $SD=2.20$ years.

Two participants were excluded from further analysis by applying criteria equivalent to the DIT reliability criteria to the DIT-CON (see Appendix B for details). In addition, one participant was excluded from further analysis for failing to answer the political questionnaire. Analyses were performed on the remaining 150 participants.

Materials

Three main questionnaires were employed; the complete versions of these scales can be found in Appendix B. The political questionnaire from Study 1 was also utilised and scores were computed as per Study 1. The DIT-CON PIC questionnaire was also used, and we augmented it with some extra items to boost its reliability. The form of the items employed can be found in Table 5.1 and the full questionnaire is available in Appendix B. Note that the “action” referred to each case now referred to DIT-CON dilemmas whereas they had referred to DIT dilemmas in Study 1 and that participants answered all 12 items for each of the 6 DIT-CON dilemmas.

The final questionnaire was the DIT-CON. To design this questionnaire, issues that conservatives currently find important (and hence, discuss) needed to be identified. To identify these issues, we took a two-pronged approach. We examined the policy platforms of Australian conservative parties as well as the US Republican Party. Such policy platforms are useful because they provide an insight into the issues that conservatives find important enough to request/demand that their representatives openly
Table 5.1

*Form of Perceived Illegality and Perceived Immorality Items Used in Study 2*

<table>
<thead>
<tr>
<th>Item</th>
<th>Question</th>
<th>Item Type</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>How do lawmakers feel about this action when they draft laws?</td>
<td>Illegal</td>
<td>0 – 10 a</td>
</tr>
<tr>
<td>2</td>
<td>How would you direct children about this action to raise them to be very moral individuals?</td>
<td>Immoral</td>
<td>0 - 10</td>
</tr>
<tr>
<td>3</td>
<td>How severely would a court punish this action if the individual was found guilty?</td>
<td>Illegal</td>
<td>0 - 10</td>
</tr>
<tr>
<td>4</td>
<td>How should society deal with individuals who perform this action?</td>
<td>Immoral</td>
<td>0 – 10 a</td>
</tr>
<tr>
<td>5</td>
<td>How right or wrong is this action?</td>
<td>Immoral</td>
<td>-5 - 5 a</td>
</tr>
<tr>
<td>6</td>
<td>How severe a violation of the law is this action?</td>
<td>Illegal</td>
<td>0 - 10 a</td>
</tr>
<tr>
<td>7</td>
<td>How likely is it that this action will be prosecuted to the full extent of the law?</td>
<td>Illegal</td>
<td>0 - 10 a</td>
</tr>
<tr>
<td>8</td>
<td>How ideal behaviour is this action?</td>
<td>Immoral</td>
<td>-5 - 5</td>
</tr>
<tr>
<td>9</td>
<td>How keen would the police be to file charges if this action occurred?</td>
<td>Illegal</td>
<td>0 - 10 a</td>
</tr>
<tr>
<td>10</td>
<td>Would this action make the world a better place?</td>
<td>Immoral</td>
<td>-5 - 5 a</td>
</tr>
<tr>
<td>11</td>
<td>Is this action compatible with the spirit of the law?</td>
<td>Illegal</td>
<td>0 - 10 a</td>
</tr>
</tbody>
</table>
Table 5.1 continued

<table>
<thead>
<tr>
<th>Item</th>
<th>Question</th>
<th>Item Type</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>This item was actually an average of two questions.</td>
<td>Immoral</td>
<td>0 - 10</td>
</tr>
</tbody>
</table>

Both questions involving asking participants to imagine they were a specified participant in the dilemma and then evaluate how fair the action was.

On the first question, the specified participant was on one side of the dilemma. On the second question, the specified person was on the other side of the dilemma. These were scored in the same direction and averaged.

Note. All items used an 11 point rating scale but the exact numbers vary (see scale column). These 8 items were repeated for each of the 6 dilemmas (with the action changing with the dilemma).

*a These items were worded such that a high score would indicate a less illegal or less immoral response.
discuss them. In addition, we examined political science textbooks (Heywood, 1994; Scott, 1997; Tansey, 1995) for their descriptions of the type of issues that conservatives find important. Such an approach allows for an insight into the underlying features of conservative thought because it is not as prone to the effects of emergent issues. What is in a platform may merely be a response to a current situation but those issues that are repeatedly in platforms and hence noted by political scientists are clearly those that get to the essence of conservative thought.

Each of the six dilemmas is presented below. To test the Social Communication Hypothesis, these dilemmas need to be written such that if moral judgements are simply a function of political beliefs, conservatives would reject the conclusion of a stage 4 moral argument (see Section 5.4). To test the Importance Hypothesis, these dilemmas need to involve issue that conservatives find important (see Section 5.5). For each dilemma below, it is explained how the dilemma achieves these criteria.

Dilemma 1 - Sue and Louise

Two important contemporary conservative ideas are that economic matters (such as employment decisions) should be left to the free market (even though such opinions were historically liberal) and that policies towards minority members of society have gone too far (Heywood 1994; Scott, 1997; Tansey, 1995). These form the basis of the Sue and Louise dilemma.

Sue is a single mother and the owner of a shop that needs to be open long hours to obtain sufficient business. Sue hires a person called Louise to run the shop when she’s not there. Before working in the shop, Louise had been unemployed for about a year and was almost totally broke when Sue
finally hired her. After expenses the shop makes just enough money for Sue to support herself and her two children.

After working in the shop for a few months but not long enough to earn maternity leave, Louise becomes pregnant and becomes increasingly unable to perform her duties. New anti-discrimination legislation requires Sue to find alternate duties for Louise to perform and deems it illegal to fire her. However, in a small business like Sue’s shop, finding alternate duties becomes increasingly difficult. Sue cannot afford to hire a third person. Sue considers firing Louise and hiring somebody new so she doesn’t have to close her shop.

Should Sue fire Louise?

___ Should fire her ___ Can’t decide ___ Should not fire her

In this dilemma, Louise takes the part of a minority member (i.e., a pregnant woman) who is getting (what we expect conservatives to see as) unfair advantages because of her minority status. Conservatives would hence not be expected to feel sympathetic to her situation. In addition to this, conservatives would be inclined to support Sue regardless of Louise’s minority status because they would argue, on the basis of support for the free market, that Sue should be able to run her business the way she wants to without interference.

Thus, if their moral judgements were a function of their politics (as postulated by the Social Communication Hypothesis), conservatives would be expected to reject the stage 4 support of the law here and endorse the firing of Louise. Consequently, this dilemma satisfies the requirement for testing the Social Communication Hypothesis because this is a situation where, if they are applying political criteria, conservatives should reject the conclusion of stage 4 reasoning (which opposes Sue firing Louise).
Additionally, the issues of over-benefited minorities and free market economics are important to conservatives (Heywood 1994; Scott, 1997; Tansey, 1995) and thus this dilemma satisfies the requirement for testing the Importance Hypothesis (namely that issues involved in the dilemma be those that are important to conservatives).

Dilemma 2 - Phil and the Addicts

Conservatives usually are strongly opposed to drugs (Liberal Party of Australia [despite its name this is Australia’s largest conservative party], 2001; Scott, 1997) and believe that criminals should be treated harshly (Heywood, 1994; Scott, 1997; Tansey, 1995). Thus, conservatives would be expected to be relatively tolerant of those who deal harshly with drug-dealing criminals (especially when no one else is). This is the basis of the Phil and the Addicts dilemma.

Phil runs a grocery shop. As this shop is near many different transportation routes, drug dealers have realised that this is a good place to do business and can frequently be found near Phil’s shop. They have also attracted many drug addicts who sometimes pass out in front of Phil’s shop and harass and intimidate the store’s clientele.

The drug addicts ignore Phil’s requests that they leave and, while Phil has repeatedly called the police, they seem unwilling or unable to deal with the problem. Lately some customers have been saying that they are too scared to go to Phil’s shop. Phil considers physically attacking the addicts in order to force them to leave.

Is it right for Phil to do this?

_ Yes, Phil should attack them _ Can’t decide _ No, Phil should not attack them
If moral judgement is a function of political belief, as postulated by the Social Communication Hypothesis, conservatives would be expected to be more sympathetic to Phil’s physical attack than liberals because Phil’s attack is likely to be the harsh treatment that the addicts deserve, which the police are not providing (Heywood, 1994; Scott, 1997; Tansey, 1995). Thus, according to the Social Communication Hypothesis, conservatives will be more likely than liberals to reject the conclusion of a stage 4 moral argument because such an argument would lead to opposition to Phil’s attack. Thus, this dilemma satisfies the criteria for testing the Social Communication Hypothesis. Additionally, the need to deal with crime and drugs harshly is an issue important to conservatives (Heywood, 1994; Liberal Party of Australia, 2001; Scott, 1997; Tansey, 1995) and thus the criteria to test the Importance Hypothesis have also been satisfied.

Dilemma 3 - Joe and Whaling

The right to economic freedom as well as opposition to social engineering are considered modern conservative positions (Heywood, 1994; Scott, 1997; Tansey, 1995). These form the basis of the Joe and Whaling dilemma.

Joe is an Eskimo whaler and comes from a tradition of whaling. Usually, in a given season, Joe will catch about 20 whales. However, for many years, commercial whaling boats have each been catching hundreds of whales each season. This has seriously depleted the stocks of whales and consequently many people have become concerned.

As a result, the United Nations passes a resolution outlawing the hunting of whales and, subsequently, Joe’s government signs a treaty and passes a law banning whaling despite considerable community opposition. Due to the shortage of whale products, a black market emerges where prices are about four times what they were. As Joe is 40 years old and has few other skills
with which to earn money, he considers continuing to whale to support himself. Because of the black market, if Joe does keep whaling, he will only hunt 5 whales a season.

Should Joe continue to whale?

__ Should continue whaling  __ Can’t decide  __ Should not continue whaling

Conservatives would be expected to be sympathetic to Joe’s situation because they would argue that environmental regulation is resulting in a reduction in Joe’s economic freedom. Indeed, they would argue that this environmental regulation actually is a form of social engineering towards Joe’s community. Thus, the Social Communication Hypothesis would predict that conservatives to be more likely to support the Eskimo continuing to whale and reject the conclusion of stage 4 moral reasoning which would require he stop whaling. Additionally, the Importance Hypothesis predicts that conservatives should reason in a more advanced way than liberals on this dilemma because conservatives consider the issues addressed by this dilemma to be important (see Heywood, 1994; Scott, 1997; Tansey, 1995).

Dilemma 4 - Deborah and Her Shotgun

The right to bear firearms has been an important issue for conservative parties such as the Republican Party in the United States (Republican National Committee, 2000; Scott, 1997). Additionally, a similarly conservative gun lobby exists in Australia

27 Conservatives would argue that the purpose of the law might not be social engineering but this is the effect.
This issue forms the basis of the Deborah and Her Shotgun dilemma.

Deborah is a farmer with a farm just south of Brisbane. One of the problems her farm faces is wild boar attacks. Such animals are very strong and powerful and, as well as destroying livestock, maim and kill humans. When a boar is charging, it is very hard to stop. Indeed, it takes an accurate shot from a powerful shotgun to bring such an animal down.

For her protection, Deborah uses a pump-action shotgun because this makes it relatively easy to fire multiple shells. However, these weapons are illegal because criminals have been known to steal these weapons and then use them in violent crimes. Indeed, many years ago such a shotgun was stolen from Deborah’s farm and used in an armed robbery. Deborah is able to relinquish her weapon without being arrested or charged.

Should Deborah relinquish her pump action shotgun?

__ Should relinquish it       __ Can’t decide       __ Should not relinquish it

If their moral judgements are dictated by their political beliefs, as postulated by the Social Communication Hypothesis, we would expect conservatives to support Deborah keeping her shotgun and be more likely to reject the stage 4 authorities that demand she relinquish it. Thus, the requirements to test the Social Communication Hypothesis have been met. Additionally, because gun ownership issues are important to conservatives (Australian Shooters Party, 2001; Republican National Committee, 2000; Scott, 1997), this dilemma satisfies the requirements to test the Importance Hypothesis.

28 Though perhaps this is not quite as salient an issue in Australia as it is in the USA.
Dilemma 5 - Policeman’s Dilemma

Whilst this dilemma has its own logic for inclusion (outlined below), it can also be considered to be a conservative analogue to the DIT’s “Doctor’s Dilemma” dilemma. Conservatives typically believe that the criminal is “a morally bad person and therefore deserves to be treated as such” (Heywood, 1994, p. 188). Additionally, they often hold the opinions that society should be tougher on criminals and that police should have stronger powers (Heywood, 1994; Scott, 1997; Tansey, 1995). These form the basis of the Policeman’s Dilemma.

Peter is a detective in the police force. Currently he is investigating a string of bank robberies – the last of which resulted in a person getting killed. The word on the street, from several reliable informants, is that a certain gang of criminals committed the crime. However, the search for evidence has been fruitless. Believing his sources to be accurate, Peter considers planting incriminating evidence on the suspects in order to arrest them and, ultimately, send them to gaol.

Should Peter plant the evidence?

__ Should plant it       __ Can’t decide  __ Should not plant it

We would thus expect that conservatives would feel antipathy towards the criminals and, in consequence, would feel more sympathetic to Peter’s desire to get the criminals off the street regardless of the proper legal investigatory procedures.

Hence, if, as predicted by the Social Communication Hypothesis, conservatives morally judged this issue on political grounds, they would be more likely to reject the stage 4 support of the law and support the planting of the evidence. Thus, they would be more likely to adopt postconventional reasoning as such reasoning would support their political beliefs. Additionally, dealing with criminals is an important issue for
conservatives (Heywood, 1994; Liberal Party of Australia, 2001; Scott, 1997; Tansey, 1995) and thus the Importance Hypothesis would predict that conservatives would reason more postconventionally on this issue. This is especially the case as this situation deals with a circumstance where the usual means of dealing with criminals has failed.

It could be noted that this dilemma seems shorter than some of the dilemmas that preceded it. This was not by accident. The dilemma lengths on DIT-CON dilemmas were allowed to vary because DIT dilemmas also vary in length and the DIT-CON was designed to be a conservative analogue of the DIT as much as practically feasible.

**Dilemma 6 - The Clinic**

While this dilemma has its own logic for inclusion (outlined below), it can also be considered to be a conservative analogue to the DIT’s “Student Take-over” dilemma. Conservatives are typically opposed to ‘morally permissive’ and counterculture behaviour such as drug taking (Liberal Party of Australia, 2001; Scott, 1997) and thus be expected to be quite concerned about situations where they propagate. This forms the basis of the “The Clinic” dilemma.

Mortvale is a suburb where a council-approved drug-rehabilitation clinic exists. However, the clinic attracts many individuals of unknown character to the area. Moreover, it is located besides a popular park that attracts children and adolescents of all ages. Many residents have unsuccessfully lobbied the council to close the clinic.

In response to this rejection, the residents blockade the clinic and harass anyone entering or exiting it. However, the police arrive and inform them that they must disperse and cease their protesting. The residents consider continuing the protest regardless.

Should they maintain the protest?
Because of their aforementioned opposition to counterculture/drug taking behaviour, conservatives would thus be expected to be quite concerned about the clinic and the individuals attracted to it. In turn, they would thus feel very sympathetic to the residents because they are attempting to “do good”.

Thus, the Social Communication Hypothesis would predict that conservatives would reject the stage 4 support of the law and utilise postconventional consideration that would support their position. Additionally, the opposition that conservatives feel about such behaviour indicates that they consider it important and thus, according to the Importance Hypothesis, it would be expected that conservatives would reason in a more advanced fashion.

**Item Composition**

The DIT-CON contained the same number of items of each type (e.g., stage 2, stage 5a, m-items) as the DIT and indices such as the p score were calculated identically. Therefore, scores between them are methodologically equivalent.

Items were constructed by two methods. The first method was by finding DIT items and applying the underlying moral principle utilised by them to the new dilemmas. Examples of items generated via this method are provided in Table 5.2. The second method was via utilisation of the general ideas behind the various Kohlbergian stages. Examples of items generated via this method are provided in Table 5.3. After these items had been constructed, they were examined by an individual not associated with this thesis but familiar with Kohlberg’s stages who was asked to classify each item according to
Table 5.2

*Examples of DIT-CON Items Derived From the DIT*

<table>
<thead>
<tr>
<th>Item Type</th>
<th>DIT Item</th>
<th>DIT-CON Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 3</td>
<td>Are the students really doing this to help other people or are they just doing it for kicks. (Student Take-over)</td>
<td>Whether Deborah’s motives for keeping the shotgun are pure. (Deborah and her Shotgun)</td>
</tr>
<tr>
<td>Stage 4</td>
<td>Whether a community’s laws are going to be upheld. (Heinz and the Drug)</td>
<td>That Phil’s attack would be considered assault. (Phil and the Addicts)</td>
</tr>
<tr>
<td>Stage 5a</td>
<td>Would going to prison do any good for Mr. Thompson or protect anybody? (Escaped Prisoner)</td>
<td>Whether the presence of the clinic would harm children. (The Clinic)</td>
</tr>
<tr>
<td>Stage 5b</td>
<td>Would refusing the job to Mr. Lee be consistent with Mr Webster’s own moral beliefs? (Webster)</td>
<td>Whether Deborah’s actions are compatible with and guided by her moral principles? (Deborah and her Shotgun)</td>
</tr>
</tbody>
</table>
Table 5.2 continued

<table>
<thead>
<tr>
<th>Item Type</th>
<th>DIT Item</th>
<th>DIT-CON Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 6</td>
<td>Is taking over a building</td>
<td>Whether planting the evidence is consistent with the principles of justice.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>consistent with the principles of justice.</td>
</tr>
<tr>
<td></td>
<td>(Student Take-over)</td>
<td>(Policeman’s Dilemma)</td>
</tr>
<tr>
<td>A</td>
<td>Wouldn’t we be better off with prisons and the oppression of our legal system.</td>
<td>That this is just another example of the repressive practices of the police.</td>
</tr>
<tr>
<td></td>
<td>(Escaped Prisoner)</td>
<td>(Policeman’s Dilemma)</td>
</tr>
</tbody>
</table>

Note. The dilemma from which the item is taken is listed in parentheses after the item. M items are not included in this table because, by definition, it is impossible to extract an underlying principle from a meaningless statement and thus no M items could be constructed via this method. Stage 2 items are not included because, at least for DIT items, it is very difficult to separate the underlying principle of Stage 2 moral reasoning from its context.
Table 5.3

*Examples of DIT-CON Items Not Directly Derived From the DIT*

<table>
<thead>
<tr>
<th>Item Type</th>
<th>DIT-CON Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 2</td>
<td>Whether Joe’s continuing to whale will result in him having a relatively better life? (Joe and Whaling)</td>
</tr>
<tr>
<td>Stage 3</td>
<td>Did Louise anticipate that Sue might be placed in such a difficult situation before she became pregnant? (Sue and Louise)</td>
</tr>
<tr>
<td>Stage 4</td>
<td>Whether the law or the law enforcer is the higher authority? (Policeman’s Dilemma)</td>
</tr>
<tr>
<td>Stage 5a</td>
<td>Should a government have the right to pass laws that directly damage citizens’ quality of life without improving the lot of others? (Joe and Whaling)</td>
</tr>
<tr>
<td>Stage 5b</td>
<td>If Sue was firing Louise because she believed she had a moral obligation to care for her children. (Sue and Louise)</td>
</tr>
<tr>
<td>Stage 6</td>
<td>Whether the principle of self-defence overrides all other concerns. (Deborah and her Shotgun)</td>
</tr>
</tbody>
</table>
Table 5.3 continued

<table>
<thead>
<tr>
<th>Item Type</th>
<th>DIT-CON Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Whether Deborah’s rights to defend herself are going to be mercilessly trampled on by a cold-hearted government. (Deborah and her Shotgun)</td>
</tr>
<tr>
<td>M</td>
<td>Whether the principle of self-defence is consummate with the injecting of drugs? (Phil and the Addicts)</td>
</tr>
</tbody>
</table>

Note. The dilemma from which the item is taken is listed in parentheses after the item.
what stage it represented. If this individual’s classification did not match our stage designation for a given item then the item in question was rewritten.

*Procedure and Counterbalancing*

These were performed identically to Study 1 to ensure that the only differences between the studies were the dilemmas themselves. This difference was unavoidable because, although DIT-CON items were derived from DIT items, it is impossible to make the dilemmas completely equivalent given their scope. Participants answered the questionnaire in pencil and paper format. Dilemma order, whether moral or political questions were asked first, and whether DIT-CON PIC or DIT-CON questions were asked first were all counterbalanced.

*Results*

*DIT-CON PIC Scores*

Hypotheses 1 and 2 were examined by a Repeated Measures One-Way Anova performed on the perceived illegality scores and perceived immorality scores respectively. It was found that different dilemmas produced both significantly different perceived illegality scores \( (F(5,740)=80.777; \ p<0.001)^{29} \) and significantly different perceived immorality scores (Greenhouse-Geisser corrected \( F(3.680, 544.643) =130.131; \ p<0.001 \)).

\[\text{\underline{\text{\textsuperscript{29} Greenhouse-Geisser corrections were not needed because Mauchly’s test of Sphericity was not significant.}}}\]
Hypotheses 3 and 4 were examined via calculation of Cronbach’s Alpha for the perceived illegality and perceived immorality items respectively. Cronbach’s Alpha was $\alpha=0.84$ for the perceived immorality items (36 items) and $\alpha=0.85$ for the perceived illegality items (36 items).

Hypothesis 5 was examined via examination of PIC score descriptive statistics. Descriptive statistics for variables utilised in this experiment are presented in Table 5.4 which reveals that DIT-CON PIC scores had a $M=0.58$ with $SD=0.38$. Considering the scale range of DIT-CON PIC scores is (-1,1), this is a typical spread of scores for a continuous variable (Howell, 1997).

Table 5.5 presents the correlation matrix of the main measures utilised in this experiment. Hypotheses 6 and 7 predicted correlations between DIT-CON PIC scores and stage 4 scores and a scores respectively. DIT-CON PIC scores were not significantly correlated with stage 4 scores ($r(150)=.14; p>0.05$) but were significantly negatively correlated with a scores ($r(150)=-.16; p<0.05$). To examine Hypothesis 8, correlations between DIT-CON PIC scores and both p scores and DIT-CON PIC scores and stage 2+3 scores were calculated. DIT-CON PIC scores were not significantly correlated with p scores ($r(135)=.06; p>0.4$) nor stage 2+3 scores ($r(150)=-.15; p>0.05$). Hypothesis 9 predicted that DIT-CON PIC scores would be correlated with conservatism but the correlation failed to reach significance ($r(150)=.04; p>0.6$).

**DIT-CON Scores**

To test Hypothesis 10, Cronbach’s alpha was computed for DIT-CON p score and was found to be $\alpha=0.41$ (6 items). This figure is low enough to suggest that some DIT-
Table 5.4

*Study 2 Summary Statistics of Moral Reasoning and Liberalism-Conservatism Measures*

<table>
<thead>
<tr>
<th>Measure</th>
<th>Mean</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Scale Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A&lt;sup&gt;1&lt;/sup&gt;</td>
<td>1.66</td>
<td>2.77</td>
<td>0</td>
<td>13.3</td>
<td>0 - 33.3</td>
</tr>
<tr>
<td>P&lt;sup&gt;2&lt;/sup&gt;</td>
<td>47.10</td>
<td>11.44</td>
<td>15</td>
<td>73.3</td>
<td>0 - 95</td>
</tr>
<tr>
<td>PIC&lt;sup&gt;3&lt;/sup&gt;</td>
<td>0.58</td>
<td>0.38</td>
<td>-0.91</td>
<td>0.99</td>
<td>-1 - 1</td>
</tr>
<tr>
<td>Political&lt;sup&gt;4&lt;/sup&gt;</td>
<td>99.40</td>
<td>14.01</td>
<td>55</td>
<td>135</td>
<td>36 - 180</td>
</tr>
<tr>
<td>Stage 2+3&lt;sup&gt;3&lt;/sup&gt;</td>
<td>20.82</td>
<td>9.54</td>
<td>3.3</td>
<td>48.3</td>
<td>0 - 96.7</td>
</tr>
<tr>
<td>Stage 4&lt;sup&gt;6&lt;/sup&gt;</td>
<td>29.14</td>
<td>10.65</td>
<td>3.3</td>
<td>55</td>
<td>0 - 90</td>
</tr>
</tbody>
</table>

Note. A, P, Stage 2+3 and Stage 4 scores are all calculated from the DIT-CON.

1<sup>1</sup> A scores measure preference for anti-authoritarian moral reasoning.

2<sup>2</sup> P scores measure preference for postconventional moral reasoning.

3<sup>3</sup> PIC scores measure the degree to which an individual correlates the illegality and the immorality of an act calculated across DIT-CON dilemmas.

4<sup>4</sup> Political scores measure liberalism-conservatism scored in the conservative direction.

5<sup>5</sup> Stage 2+3 scores measure combined preference for stage 2 and stage 3 moral reasoning.

6<sup>6</sup> Stage 4 scores measure preference for stage 4 moral reasoning.
Table 5.5

**Study 2 Intercorrelations Between Moral Reasoning and Liberalism-Conservatism Measures**

<table>
<thead>
<tr>
<th>Measure</th>
<th>P²</th>
<th>PIC³</th>
<th>Political⁴</th>
<th>Stage 2+3⁵</th>
<th>Stage 4⁶</th>
</tr>
</thead>
<tbody>
<tr>
<td>A¹</td>
<td>-.28**</td>
<td>-.16*</td>
<td>.15</td>
<td>-.06</td>
<td>.09</td>
</tr>
<tr>
<td>P²</td>
<td></td>
<td>-.33***</td>
<td>-.44***</td>
<td>-.55***</td>
<td></td>
</tr>
<tr>
<td>PIC³</td>
<td></td>
<td></td>
<td>.04</td>
<td>-.15</td>
<td>.14</td>
</tr>
<tr>
<td>Political⁴</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.24**</td>
</tr>
<tr>
<td>Stage 2+3⁵</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.45***</td>
</tr>
</tbody>
</table>

Note. A, P, Stage 2+3 and Stage 4 scores are all calculated from the DIT-CON.

1 A scores measure preference for anti-authoritarian moral reasoning.
2 P scores measure preference for postconventional moral reasoning.
3 PIC scores measure the degree to which an individual correlates the illegality and the immorality of an act calculated across DIT-CON dilemmas.
4 Political scores measure liberalism-conservatism scored in the conservative direction.
5 Stage 2+3 scores measure combined preference for stage 2 and stage 3 moral reasoning.
6 Stage 4 scores measure preference for stage 4 moral reasoning.

* p<0.05; ** p<0.01; *** p<0.001
CON items might be problematic and that caution should be employed in interpreting the results of analyses performed on DIT-CON scores.

Hypotheses 11 predicted that p scores would be positively correlated with political scores. P scores were significantly correlated with political scores ($r(150)=-.33; p<0.001$) but the direction of the correlation was the opposite to that hypothesised. Additionally, this correlation between p scores and conservatism was not significantly different to that observed in Study 1 ($z=1.70; p>0.05$).

We were concerned that this analysis may have been affected by the reliability of the DIT-CON p score. Thus, we performed attenuation corrections\(^{30}\) on the correlations between p scores and conservatism scores (from both studies) as suggested by Guilford (1954). For Study 2, the corrected correlation was $r=-0.515 (p<0.001)$. The corrected correlation from Study 1 was $r=-0.635 (p<0.001)$. The difference between these corrected correlations is not significant ($z=1.50; p>0.1$) and is less than the difference between the uncorrected correlations suggesting that, if anything, the reliability of the DIT-CON p scores weakened the observed correlation (i.e., between p scores and conservatism) in Study 2.

Hypothesis 12 predicted that political scores would be negatively correlated with stage 4 scores but the correlations between these variables was not significant ($r(150)=0.077; p>0.3$).

---

\(^{30}\) Guildford’s (1954) correction is designed to recalculate a correlation if the measures underlying the correlation are not completely reliable.
Comparing DIT and DIT-CON Scores

Table 5.6 presents the mean stage 4 and p scores for DIT responses (i.e., from Study 1) and DIT-CON responses (i.e., from Study 2). Whether or not these apparent differences were significant was investigated by independent samples t-tests. DIT-CON p scores were significantly higher than DIT p scores (t(283)=9.30; p<0.001) and DIT-CON stage 4 scores were significantly lower than DIT stage 4 scores (t(283)=2.21; p<0.05).

It appeared intriguing that liberalism-conservatism was positively correlated with postconventional reasoning but not negatively correlated with stage 4 or anti-authoritarian reasoning because usually correlations between liberalism-conservatism and Kohlbergian moral reasoning (see Section 2.3; e.g., Barnett et al., 1995; Emler et al., 1998; Fishkin et al., 1973) involve both postconventional and stage 4 moral reasoning. Thus, it was decided post hoc to investigate the possibility that conservatives were utilising more stage 2 or 3 reasoning perhaps because they found stage 4 reasoning unpalatable but were not able or willing to utilise postconventional moral reasoning. Stage 2 and stage 3 scores were summed to produce a DIT-CON stage 2/3 score and this score was significantly positively correlated with conservatism (r=0.24; p<0.005). By contrast, in Study 1 conservatism had not been correlated with DIT stage 2/3 reasoning (r=0.09; p>0.2).

The combination of stage 2 and stage 3 reasoning into one score is not problematic for two major reasons. Firstly, the point of examining stage 2 + 3 scores is to measure preference for Kohlbergian reasoning other than stage 4 and postconventional. Whether the conservatives utilise stage 2 or stage 3 reasoning here is not the issue – the
Table 5.6

*DIT and DIT-CON P and Stage 4 Scores*

<table>
<thead>
<tr>
<th>Measure</th>
<th>DIT 3</th>
<th>DIT-CON 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>33.95 (13.35)</td>
<td>47.10 (11.44)</td>
</tr>
<tr>
<td>Stage 42</td>
<td>32.22 (12.75)</td>
<td>29.14 (10.65)</td>
</tr>
</tbody>
</table>

1 P scores measure preference for postconventional moral reasoning.
2 Stage 4 scores measure preference for stage 4 moral reasoning.
3 DIT refers to scores produced employing the DIT in Study 1.
4 DIT-CON refers to scores produced employing the DIT-CON in Study 2.
point is that when stage 4 reasoning is made politically unattractive to them, they do not respond by reasoning postconventionally. Secondly, as noted by Rest et al. (1999a, 1999b) stage 2 and stage 3 reasoning seem to cluster together and can be viewed as a “personal interests” schema (Rest et al, 1999a, 1999b).

Discussion

DIT-CON PIC Scores

Utilisation of the DIT-CON PIC score for DIT-CON dilemmas is not recommended. Hypotheses 1-8 described various statistical requirements for PIC scores to be utilised and all of these hypotheses were confirmed with the exception of Hypothesis 6. However, Hypothesis 6 was that DIT-CON PIC scores would be significantly positively correlated with Stage 4 scores which is critically important for DIT-CON PIC scores because DIT-CON PIC scores were designed to indirectly measure utilisation of (some) stage 4 moral reasoning (see Section 4.4). It is very difficult to argue that they do so when they do not correlate with a direct stage 4 moral reasoning measure.

One reason why PIC scores might not be appropriate for DIT-CON dilemmas is that PIC scores were constructed with the theoretical assumption of a negative relationship between stage 4 anti-authoritarian moral reasoning (see sections 4.4 and 4.5) but this was not evident in this study. Unlike Study 1, Study 2 found no significant correlation between a scores and stage 4 scores (Study 1 had found a significant negative correlation). In this context, where basing morality in society’s social systems is not
negatively associated with basing morality in opposition to society’s social systems, it is
difficult to make predictions about PIC score correlations because participant attitudes to
social systems (including the legal system) do not appear to be consistent.

That being said, Hypothesis 9 was not confirmed – PIC Scores were not
significantly correlated with liberalism-conservatism but because of the reasons provided
above, it does not seem prudent to draw any conclusions from this.

**DIT-CON Scores and Conservatism**

Hypothesis 10 was that DIT-CON scores would show internal consistency. Unfortunately, reliability was low for DIT-CON p scores. While, as mentioned in the Results section, an attempt was made to correct for this, caution is urged in regard to the definitiveness of the conclusions below. One possible reason for the low reliability is that the moral reasoning considerations that people consider important for DIT dilemmas are not the same as those considered important for DIT-CON dilemmas. Therefore the construction of some DIT-CON items by “transferring” DIT items (see Item Composition in the Method section) may have produced faulty items. One way to avoid such problems with a future DIT-CON could be to derive these items from interviews with participants as was done with the construction of the DIT (Rest et al., 1974).

Hypothesis 11 predicted that DIT-CON p scores would be significantly positively correlated with conservatism. While p scores were correlated with political score, this was in the opposite direction to that predicted in this hypothesis (which was derived from both the Social Communication Hypothesis and the Importance Hypothesis). The Guilford (1954) correction suggests that this correlation occurred in spite of the DIT-
CON’s low reliability not because of it. This correlation was not significantly different to that observed in Study 1 whether or not the relevant correlations were corrected using the Guildford (1954) procedure. Thus, while any conclusions drawn from this experiment need to be tentative, there is evidence that the low reliability of the DIT-CON does not render it useless.

This fact that the correlation between p scores and liberalism-conservatism found in Study 2 was not significantly different to that found in Study 1 is the most important result in Study 2. Despite the presence of conservative issues in the DIT-CON, the significant negative correlation between political scores and postconventional reasoning suggests that liberals still appear to utilise more postconventional reasoning than conservatives. The issue of dilemma bias does not appear to explain the correlation between liberalism and p scores that is usually found on the DIT. The relationship between political orientation and moral reasoning is relatively stable across political context. Whatever is causing the relationship between liberalism and postconventional moral reasoning appears to be independent of the political content of moral reasoning dilemmas.

Another important finding from Study 2 was the lack of a significant relationship between conservatism and stage 4 reasoning. Previous research using the MJT and DIT (see Section 2.3; e.g., Barnett et al., 1995; Emler et al., 1998; Fishkin et al., 1973) usually observed such a relationship. Hypothesis 12, derived from both the Social Communication Hypothesis and the Importance Hypothesis, predicted that there would be a negative correlation but was not supported.
The fact that conservatism was no longer correlated with stage 4 moral reasoning could either be due to liberals utilising more stage 4 moral reasoning or conservatives using less stage 4 moral reasoning. However, Table 5.6 indicates that, DIT-CON stage 4 scores appear lower than DIT stage 4 scores and this was confirmed by a post-hoc t-test. This indicates reduced utilisation of stage 4 moral reasoning on the DIT-CON (compared to the DIT) and thus suggests that the explanation that conservatives employed less stage 4 reasoning than in Study 1 is more plausible than the explanation that liberals employed more. Additionally, a significant positive correlation between stage 2+3 scores and conservatism was found on DIT-CON dilemmas but this correlation was not significant in Study 1 which is more consistent with reduced conservative stage 4 reasoning as opposed to increased liberal stage 4 reasoning because it suggests that conservative moral reasoning has been “displaced” from stage 4 to stage 2+3.

Conclusion From Study 2

Study 2 tested the role of dilemma content in moral reasoning by creating the DIT-CON – an instrument designed to mimic the DIT except with conservatively biased dilemma content instead of the usual liberally biased dilemma content. In this context, the Social Communication Hypothesis and the Importance Hypothesis predicted that the relationship between p scores and liberalism-conservatism should change but they did not. However, the low reliability of the DIT-CON means that these results cannot be taken as definitive.
A way of testing the remaining hypotheses is via investigation of moral comprehension (see Chapter 3) but before this can be done, a moral comprehension scale needs to be constructed and this was the aim of Study 3.
Chapter 6

Study 3

The Development of a Moral Comprehension Test

6.1 Introduction

As discussed in Chapters 4 and 5 respectively, Studies 1 and 2 examined accounts of the relationship between Kohlbergian moral reasoning and liberalism-conservatism based on the composition of moral reasoning instruments. Study 1 investigated the issue of moral reasoning endorsement (see also Section 2.5) and the DIT’s ipsativity of scoring. Study 2 examined the potential effects of the DIT’s dilemma bias. Study 1 found that the relationship between liberalism-conservatism and Kohlbergian moral reasoning was present in a non-ipsative context. Although there were some methodological issues, Study 2 indicated that liberalism and the endorsement of post-conventional reasoning appear to be associated when conservatively biased dilemmas are used. Consequently, neither study provides evidence that either of these issues is problematic.

Thus, this thesis now turns its attention to those hypotheses that do not regard DIT scores as problematic in terms of accurately denoting the moral reasoning differences between liberals and conservatives. These hypotheses can all be tested in a study that contains a valid measure of moral comprehension, the DIT and a liberalism-conservatism

31 As indicated at the end of Chapter 5, the Importance Hypothesis will also be retested.
measure. However, before these hypotheses can be tested, a suitably valid measure of moral comprehension needs to be developed. Study 3 aims to develop such a measure so that it can be used in Study 4. As such, Study 3 does not test any hypotheses but provides a foundation for hypotheses to be tested in Study 4.

6.2 The Need for a Moral Comprehension Scale

Of the hypotheses discussed in Chapter 3, four remain – the Sophistication Hypothesis (see Section 3.2(i)), the Choice Hypothesis (see Section 3.6), the Two Paths Hypothesis (see Section 3.7) and the Importance Hypothesis (see Section 3.9). All of these hypotheses postulate that, at least for some individuals, differences in moral-cognitive development result in the degree to which postconventional reasoning is utilised. To test this claim, some type of moral-cognitive measure is needed. As noted in Section 3.2, a moral comprehension measure is a good candidate for such a measure because logically individuals must be able to understand moral reasoning prior to employing it.

As discussed in sections 2.7 and 3.2(i), when Rest et al. (1974) first published the DIT, they included Cooper’s (1972) measure of “comprehension of social-moral concepts” (Rest et al., 1974, p. 494). This test required respondents to read 10 paragraphs and indicate which one of four alternatives best matched it. This comprehension measure was found to correlate with p scores at $r=0.58$. Cooper’s (1972) moral comprehension measure appears to be the only direct objective measure of moral comprehension employed in published research - Thornton et al.’s (1991) task was not identical to Cooper’s (1972) task but it was based on the task and was very similar in content. Some
studies have attempted to measure moral comprehension using an interview approach (e.g., Rest, Turiel & Kohlberg, 1969; Walker, de Vries & Bichard, 1984) but these have the same problems of subjectivity in scoring that the MJI does (see Section 1.5). Recently, Narvaez (1998) has attempted to assess moral comprehension in terms of greater recall and reconstruction of moral arguments, however recall is an indirect measure of comprehension. For instance, an alternate interpretation of Narvaez’s (1998) finding that individuals with high p scores recalled more stage 5 items in Narvaez’s (1998) study was that they considered such items to be more important (which is the precise meaning of having high p scores) and hence put more effort into the task. Regardless of whether this particular alternate interpretation is accurate, a direct measure is preferable over an indirect one because less alternative interpretations are possible allowing a reduced level of concern regarding the validity of its results.

Cooper’s (1972) moral comprehension measure is problematic. As noted in Section 2.7, this measure produces potentially inconsistent results. Rest et al. (1974) found that this moral comprehension measure did not significantly correlate with two measures related to liberalism-conservatism – $r=.08$ with a libertarianism measure and $r=.12$ with a Law and Order measure. By contrast, Thornton et al. (1991), using an ANOVA design, found that individuals high in moral comprehension were more liberal than those low in moral comprehension. These potentially conflicting results make the use of Cooper’s (1972) moral comprehension task especially problematic for this thesis. This thesis aims to employ a moral comprehension measure to determine if any moral-cognitive difference between liberals and conservatives exists. However, it is precisely on this issue that the Cooper (1972) moral comprehension measure has produced
contradictory results. Thus, if this measure was used in this thesis, any results gleaned from it would be tenuous at best. Additionally, as noted in Section 2.7, the Cronbach’s Alpha ($\alpha=0.5$) of the measure was not ideal (Thornton et al., 1991).

Walsh and Betz (1995) comment that a source of a number of problems in test design is poor sampling of items from the subject domain. From the details given by Rest et al. (1974), it appears that Cooper’s (1972) moral comprehension measure utilises a somewhat narrow selection of items. Indeed, as discussed in the next two sections, it appears that both “moral” component and the “comprehension” component are limited in terms of failing to adequately cover these areas.

### 6.3 A Moral Comprehension Scale with an Improved “Moral Component”

By the “moral component” what is meant is the degree to which the instrument relates to, and is built upon, moral reasoning concepts. In particular, the moral component refers to the types of moral reasoning that are employed for the purpose of examining comprehension. Rest et al. (1974) comment that the moral reasoning concepts examined by the Cooper (1972) measure include “legitimised authority”, “social contract” and “due process” (Rest et al., 1974, p. 494). Each of these are postconventional themes – e.g., the distinction between legitimate and illegitimate authority only becomes meaningful when one progresses beyond stage 4 reasoning. Thus, in terms of the moral component, Cooper's (1972) instrument only addresses postconventional moral reasoning.
However, Thornton et al. (1991) found that 25% of participants performed at/below chance on a slightly modified version of this instrument\(^{32}\). Thus, it is entirely possible that, for many individuals, a moral comprehension scale that only focuses on postconventional reasoning is too difficult a measure. This floor effect alone may account for the internal consistency problems.

Moreover, if moral reasoning is viewed developmentally then understanding of lower stage reasoning should also be important. For instance, if two individuals understand equal degrees of postconventional reasoning but one understands greater amounts of, say, stage 4 moral reasoning, it would be logical to conclude that that individual showed a greater overall understanding of moral reasoning.

This invites the question of what stages to include in a new moral comprehension scale and on what basis. Usually if something is too difficult or too easy, there will be a ceiling or floor effect. Because of the ipsative nature of the DIT, ceiling and floor effects will look quite similar. More precisely, if a type of moral reasoning level is, on the whole, too sophisticated or too elementary for a population then we would expect that the distribution for the relevant items to be positively skewed because most individuals would endorse very few of these items.

Looking at frequency histograms from Study 1 (see Appendix C), it appears that the distributions for stage 3, 4 and 5 reasoning are all reasonably symmetric whereas the distributions for stage 2 and 6 reasoning are positively skewed.\(^{33}\) Thus, the distribution

\(^{32}\) Scores of 4 or less where 3.5 was chance.

\(^{33}\) M and A items were not examined because they do not have a firm basis in (neo-)Kohlbergian theory.
of DIT scores suggests that a revised moral comprehension test should contain items testing the comprehension of stage 3, 4 and 5 items.

However, as noted in Section 1.9, the DIT contains very few stage 2 and 6 items. Consequently, it might be argued that the reason that DIT stage 2 and stage 6 scores are not normally distributed is because of the paucity of those items in the DIT. In response to this, two comments can be offered. The first is that evidence from the MJI suggests that young adults (the present thesis utilises university students as participants) engage in a large amount of stage 3 and 4 reasoning and an increasing amount of stage 5 reasoning but minimal stage 2 and stage 1 reasoning (e.g., Colby et al., 1983). Therefore, the usage of stages 3, 4 and 5 in a moral comprehension instrument could equally be derived from MJI data as well as DIT data. Secondly, as discussed in Chapter 2, considerable research on the relationship between liberalism-conservatism and Kohlbergian moral reasoning has employed the DIT. Consequently, examining DIT distributions to determine the stage level of moral comprehension items allows a certain consistency with this prior research.

6.4 A Moral Comprehension Scale With An Improved “Comprehension Component”

By the “comprehension component”, what is meant is the means by which the task attempts to measure understanding. Cooper’s (1972) task simply asked individuals to match the original paragraph to the item that best rephrased it. While such an approach appears to have face validity, by itself, it may be too narrowly focused.
Moral reasoning is essentially language that utilises a moral principle\textsuperscript{34}. Hence, to understand what it means to comprehend moral reasoning, it is useful to examine what it means to understand language. Ruddell (1994) argues that comprehension of words is not an either-or proposition. Rather there is a continuum of understanding, ranging from no understanding to complete understanding, where a person might be able to discern the meaning of the word from context or understand the general gist of a word but not be able to give an accurate definition (Ruddell, 1994).

Likewise, it is possible that a person may have some type of idea of what a moral argument is saying but not enough of an idea to work out an appropriate rephrase (as was required by Cooper’s, 1972 task). Thus, a revised moral comprehension measure should make some attempt to assess “partial moral comprehension” – where some understanding of moral reasoning is present but this is insufficient to rephrase the argument. One way to do this is to make a moral argument and have respondents attempt to work out the position of an argument namely whether it is for or against the action in question.

Note that this does not apply to DIT items because the DIT requires individuals to evaluate moral reasoning. Instead, the proposed approach merely requires a respondent to determine the logical conclusion from such reasoning. For instance (employing an example from the DIT Heinz dilemma) a sample item would be “If a person, said ‘the

\textsuperscript{34} By “moral principle”, what is meant is some general criterion or criteria via which moral judgements can be reached (as opposed to the narrow Kohlbergian stage 6 meaning of “moral principle”). Thus, “do unto others” or “act like a good girl should” would be moral principles in the way that the term is being used here.
druggist's right to his invention should be respected', would that person support or oppose Heinz stealing the drug?”. Logically, respecting the druggist’s rights to his invention would not involve stealing the drug and consequently the conclusion from this argument is that Heinz should not steal the drug.

Another potential aspect missing from Cooper’s (1972) moral comprehension measure is the ability to extract moral concepts from one situation and apply them to another. Gibbs (2002) comments that in language comprehension, a distinction is often drawn between literal meaning and non-literal (or figurative) meaning. The literal meaning of a statement is determined by the process of taking the meaning of each individual word and combining these without any consideration of context (Frege, 1952; Gibbs 2002). Gibbs (2002) notes, however, that literal meaning, on its own, is too simple for most language comprehension – e.g., the literal meaning of “Cigarettes are time bombs” is that all cigarettes are detonation devices which are programmed to explode at a certain time in the future (Gibbs, 2002, p. 458).

Literal meaning also appears insufficient for much moral reasoning. For instance, a DIT item from the “Heinz and the Drug” dilemma is “whether the law is getting in the way of the most basic claim of any member of society”. To evaluate the worth of this moral reasoning, we have to apply it to the Heinz situation. Thus, without even having to consider the literal meaning of “the most basic claim of any member of society” and “the law getting in the way” (and it is not clear that these would be interpreted in a strictly literal fashion), we are forced to move beyond a literal meaning.

Indeed, moral reasoning often seems figurative even if the underlying moral principles are literally understood. Attempts to teach moral principles have often
revolved around figurative presentations such as fables and parables from at least as early as Aesop (c600BC/2002). Likewise, attempts to undermine moral positions are sometimes made by applying the underlying moral principle to a new situation – e.g., “What if you were the victim?” Moreover, if moral reasoning occurs along Kohlbergian lines, then one should be taking concepts (e.g., self-interest, obedience to authority, the rights of others) that would theoretically be expressible via purely literal statements and then applying these principles to various situations, thus necessitating a somewhat figurative basis.

6.5 Validating a New Moral Comprehension Questionnaire

The sections above discussed possible improvements (over Cooper’s, 1972 instrument) that a new moral comprehension could have both in terms of the moral and comprehension components. This two-component framework is also a solid guide as to what a moral comprehension questionnaire should do. More precisely, the instrument should demonstrate performance that distinguishes it as a more clearly cognitive instrument of comprehension than the DIT (cf Section 3.2) whilst simultaneously distinguishing itself as more related to moral reasoning than a normal (i.e., non-moral) comprehension measure.

Thus, if this new Moral Comprehension Questionnaire (MCQ) validly measures moral comprehension, then scores on it should be correlated with both DIT scores and verbal comprehension scores. However, verbal ability scores are correlated with DIT

35 Although, whether individuals could express them literally is another issue.
scores (e.g., Sanders et al., 1995; Rest, 1979). Hence, to demonstrate that any correlation with a moral comprehension questionnaire will not merely be measuring this overlap, the correlations between moral comprehension scores and either DIT scores or verbal comprehension scores should remain significant when the other variable is controlled for (e.g., moral comprehension scores should still correlate with DIT scores when verbal comprehension scores are controlled for).

6.6 Measuring Verbal Comprehension

As Gibbs (2002) comments (see Section 6.4), meaning consists of both literal and figurative meaning. Consequently, any measure purporting to assess verbal comprehension should assess both of these features. One cognitive test battery that contains tests assessing verbal comprehension from both a literal and figurative perspective is Stankov’s (1991) Gf/Gc Quickie Battery. Whilst the battery itself is designed for educational purposes, the items are derived from both theoretical and empirical knowledge of various intelligence factors including Verbal Intelligence (Stankov, 1991).

For the purposes of Study 3, only two of the tests from this battery will be employed. The first test with more of a focus on literal meaning is a multiple choice vocabulary measure involving a choice of 5 possible definitions. A number of researchers have used such a forced choice measure of vocabulary\textsuperscript{36} (e.g., Schroeder & Salthouse, 2004; Stankov & Crawford, 1998). The other test (designed to be more of a

\textsuperscript{36} Sometimes 4 options are employed and, of course, different words are used with different samples.
probe of figurative reasoning) is a verbal analogies task where respondents are required to complete part of a verbal analogy. Again, it should be noted that such analogies are in widespread use in the intelligence field (e.g., Christensen, 1994; Kuncel, Hezlett & Ones, 2004).

6.7 Hypotheses

Hypotheses involving the reliability of instruments are Hypothesis (1) that the verbal comprehension questionnaire will exhibit internal consistency; Hypothesis (2) that the moral comprehension questionnaire will display internal consistency and Hypothesis (3) that the moral comprehension questionnaire will display test-retest reliability.

Hypotheses involving the validity of instruments are Hypothesis (4) that moral comprehension will be correlated with verbal comprehension regardless of whether or not DIT scores are controlled for and Hypothesis (5) that moral comprehension will be correlated with DIT scores regardless of whether or not verbal comprehension scores are controlled for.

Method

Design

The study adopted a passive-observational design where individuals’ moral comprehension was the dependent variable and their moral reasoning and verbal comprehension were the predictor variables.
Participants

Participants were 118 first year psychology students who participated as part of their first year psychology course. Due to procedural error, age and gender were not recorded but this sample was drawn from the sample population as the Studies 1 and 2 samples (University of Sydney first year psychology students) and thus should be similar. For the reasons presented in the Method-Participants section of Chapter 4, DIT-2 method reliability checks were employed as purging criteria resulting in the elimination of 3 participants. Details of this can be found in Appendix C. One of these participants was amongst those who were required to answer the moral comprehension questionnaire twice (see Procedure).

Materials

Three questionnaires were employed. Full versions of each scale are available in Appendix C. The first questionnaire was the short form of the DIT (Rest et al., 1974, 1999a) and, while not quite as reliable as the full-length version, it typically has test-retest reliability in the mid to high 0.60s (Center for the Study of Ethical Development, 1990). The short form was employed because, in agreement with Thornton et al. (1991), piloting amongst associates revealed that the moral comprehension questionnaire was very cognitively intense and involved considerable reading. There was concern that participants may be too exhausted if the experiment included the full length DIT along with the moral comprehension questionnaire.
The second questionnaire was the verbal comprehension test. This questionnaire consisted of two sections. These sections were taken from the Gf/Gc Quickie Battery developed by Stankov (1991) as discussed in Section 6.6.

The first section (termed ‘esoteric analogies’) of the verbal comprehension questionnaire, required respondents to indicate which of four possible terms was the correct 4th term in an analogy. Thus, for the item - “Fire is to Hot as Ice is to Pole/Cold/Cream/White” - the answer would be ‘Cold’. The second section (termed ‘vocabulary’) required respondents to indicate which of the 5 words/phrases was most similar in meaning to a given word.

As a whole, the verbal comprehension test consisted of 24 esoteric analogies items and 18 vocabulary items. The proportion of items correct for each section was calculated. A person’s verbal comprehension score was the average of these two proportions. Scores were computed in this way because the vocabulary and esoteric analogies items were viewed as measuring different components of verbal comprehension and it was felt that a simple proportion would bias the test in favour of the esoteric analogies section that had more items.

The third questionnaire was the Moral Comprehension Questionnaire (MCQ). This questionnaire consisted of four sections. Items in all sections began with a quote. A selection of quotes is provided in Table 6.1.

Each of these quotes expressed a moral argument towards a given issue. The issues were those of capital punishment, condom vending machines, “work for the dole”

37 This is, of course, one of the easier items.
Table 6.1

*A Selection of Quotes From the MCQ*

<table>
<thead>
<tr>
<th>Issue</th>
<th>Position</th>
<th>Stage</th>
<th>Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Punishment</td>
<td>Undecided</td>
<td>5</td>
<td>When asked to explain his position on capital punishment, Joe remarked “Both criminals and their victims have rights. We need to examine whether depriving crooks of their right to life is balanced by protecting the right of justice for any victim’s loved ones.”</td>
</tr>
<tr>
<td>Condom Vending Machines</td>
<td>Undecided</td>
<td>5</td>
<td>When asked about her position on condom vending machines, Linh indicated “I think we need to take a broad perspective here. What will it do to our society? Will the health benefits outweigh the social cost?”</td>
</tr>
<tr>
<td>Capital Punishment</td>
<td>Against</td>
<td>5</td>
<td>When asked his position on capital punishment, Zhao revealed “What kind of society is it that condones murder. How we treat criminals filters through to how we treat everyone. While there may seem to be a short term gain for society in killing its wickedest offenders, in the long term society as a whole will pay.”</td>
</tr>
</tbody>
</table>
Table 6.1 continued

<table>
<thead>
<tr>
<th>Issue</th>
<th>Position</th>
<th>Stage</th>
<th>Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Punishment</td>
<td>Undecided</td>
<td>4</td>
<td>When asked his position on capital punishment, John remarked “People have different opinions on this one. I mean it’s outlawed and priests and other moral figures speak out against it but still too much crime leads to a breakdown in order.”</td>
</tr>
</tbody>
</table>

1 Issue refers to which issue was addressed by the quote.

2 Stage refers to the Kohlbergian status of the quote – i.e., what type of moral argument was made (classified according to Kohlberg’s stages).

3 Position refers to whether the argument was for, against or undecided towards the given issue.
(a policy where individuals are required to perform work for unemployment benefits; a definition of this was given before respondents answered the questionnaire), multiculturalism (a definition was given to respondents prior to answering the questionnaire), abortion and free university education. These issues were chosen because they entail a balance of issues that both liberals and conservatives find important (Heywood, 1994; Scott, 1997; Tansey, 1995) - thus avoiding a scenario similar to that posited by the Importance Hypothesis (see Sections 3.7 and 5.2). These were also issues with which the sample would be expected to have at least some familiarity. In Table 6.1, some quotes involving two issues are presented.

In addition to having an issue, each argument had a position. Each argument could be in favour of the given issue (e.g., in favour of abortion), opposed to the given issue or be undecided. Thus, the three positions were for, against and undecided. Across the questionnaire, there were two arguments “for”, two arguments “against” and two arguments “undecided” towards each issue. Table 6.1 provides some quotes involving two different positions.

Finally, each argument had a Kohlbergian status. The Kohlbergian status of an argument was whether the argument was a stage 3, 4 or 5 argument. Thus, the first quote present in Table 6.1 would be described as a stage 5 argument undecided about capital punishment. Table 6.1 display some quotes involving two different Kohlbergian statuses.

Table 6.2 provides a classification of all the quotes in terms of their issue, position and Kohlbergian status and reveals that an equal number of quotes of each Kohlbergian status and each issue were employed. Originally, the intention was to have equal
**Table 6.2**

*Details of MCQ Quotes*

<table>
<thead>
<tr>
<th>Section</th>
<th>Question</th>
<th>Issue</th>
<th>Stage</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>death</td>
<td>5</td>
<td>undecided</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>condom</td>
<td>4</td>
<td>against</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>dole</td>
<td>3</td>
<td>for</td>
</tr>
<tr>
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<td>4</td>
<td>dole</td>
<td>5</td>
<td>for</td>
</tr>
<tr>
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<td>5</td>
<td>culture</td>
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<td>against</td>
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<td>6</td>
<td>culture</td>
<td>5</td>
<td>against</td>
</tr>
<tr>
<td>1</td>
<td>7</td>
<td>education</td>
<td>4</td>
<td>undecided</td>
</tr>
<tr>
<td>1</td>
<td>8</td>
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<td>4</td>
<td>for</td>
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<tr>
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<td>1</td>
<td>death</td>
<td>3</td>
<td>against</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>condom</td>
<td>4</td>
<td>for</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>abortion</td>
<td>3</td>
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<tr>
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<td>2</td>
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<td>2</td>
<td>8</td>
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<td>5</td>
<td>against</td>
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<tr>
<td>2</td>
<td>9</td>
<td>dole</td>
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<tr>
<td>3</td>
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<td>for</td>
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<tr>
<td>3</td>
<td>2</td>
<td>condom</td>
<td>3</td>
<td>undecided</td>
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<tr>
<td>3</td>
<td>3</td>
<td>dole</td>
<td>3</td>
<td>against</td>
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</table>
Table 6.2 continued

<table>
<thead>
<tr>
<th>Section</th>
<th>Question</th>
<th>Issue</th>
<th>Stage</th>
<th>Position</th>
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<tbody>
<tr>
<td>3</td>
<td>4</td>
<td>education</td>
<td>5</td>
<td>against</td>
</tr>
<tr>
<td>3</td>
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<td>3</td>
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<td>culture</td>
<td>4</td>
<td>undecided</td>
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<tr>
<td>3</td>
<td>8</td>
<td>condom</td>
<td>5</td>
<td>undecided</td>
</tr>
<tr>
<td>3</td>
<td>9</td>
<td>education</td>
<td>5</td>
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<td>4</td>
<td>1</td>
<td>death</td>
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<td>4</td>
<td>2</td>
<td>education</td>
<td>4</td>
<td>against</td>
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<tr>
<td>4</td>
<td>3</td>
<td>abortion</td>
<td>5</td>
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</tr>
<tr>
<td>4</td>
<td>4</td>
<td>culture</td>
<td>3</td>
<td>undecided</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>culture</td>
<td>4</td>
<td>for</td>
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<tr>
<td>4</td>
<td>6</td>
<td>dole</td>
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<td>undecided</td>
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<td>4</td>
<td>7</td>
<td>death</td>
<td>4</td>
<td>undecided</td>
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<tr>
<td>4</td>
<td>8</td>
<td>condom</td>
<td>5</td>
<td>undecided</td>
</tr>
<tr>
<td>4</td>
<td>9</td>
<td>condom</td>
<td>3</td>
<td>against</td>
</tr>
</tbody>
</table>

1 Section refers to which section of the questionnaire the quote was in.
2 Question refers to the item number (within the listed section) of the quote.
3 Issue refers to which issue was addressed by the quote.
4 Stage refers to the Kohlbergian status of the quote – i.e., what type of moral argument was made (classified according to Kohlberg’s stages).
5 Position refers to whether the argument was for, against or undecided towards the given issue.
numbers of each position but due to procedural error an extra neutral item was included at the expense of a for item\textsuperscript{38}.

Each of the MCQ’s 4 sections had 9 items. These 9 items arise from 3 levels of Kohlbergian status crossed with 3 levels of positions. However, because of the procedural error noted in the previous paragraph, in section 4 the stage 5 “for” item was replaced with a stage 5 “neutral” item.

Each item had 2 sub-items (and the quote). The first sub-item was the same for each section. It required participants to indicate whether the quoted individual supported, opposed or was undecided about the given issue (i.e., to determine the position of the quote). This was employed to address the issue of partial understanding of moral reasoning discussed in Section 6.4.

The second sub-item varied from section to section. For the first section, respondents were required to indicate which of 5 potential statements was \textit{most} similar in meaning to the quote. For section 2, respondents were required to indicate which of 5 potential statements was \textit{least} similar in meaning to the original quote. For section 3, respondents were required to extract the core idea underlying the quote and indicate which of 5 potential statements \textit{best} applied this core idea to a different issue. Section 4 required respondents to extract the core idea underlying the quote and indicate which of 5 potential statements applied it to a different issue in the \textit{least} accurate manner.

Section 1 mirrored the type of item of that Rest et al. (1974) used in their test. As discussed in Section 6.4, the comprehension component of Rest et al.’s (1974) measure

\textsuperscript{38}Thus, For : Against : Undecided = 11 : 12 : 13.
does appear to address one aspect of comprehension (namely complete literal comprehension) and thus such items may be valuable. Sections 3 and 4 were included to address the issue of figurative comprehension (see Section 6.4). Sections 2 and 4 were included (as the complements to sections 1 and 3 respectively) to determine whether or not respondents could detect dissimilarity in the meaning of different moral reasoning as well as similarity – such questions also do not seem to be present in the Rest et al.’s (1974) moral comprehension measure.

The moral comprehension questionnaire was scored by examining, for each item, the number of sub-items correct. For each item, an item score was calculated as follows: if one of the two sub-items was answered correctly, the item score was 0.5; if both sub-items were answered correctly the item score was 1; if the neither sub-item was answered correctly the item score was 0. The score for the whole MCQ was obtained by averaging these item scores across all the items in the test.

**Procedure**

Participants signed up for this experiment via an internet-based bulletin board (Experimetrix) where all School of Psychology, University of Sydney experiments are placed.

Participants completed the questionnaire in groups with an average size of 9 individuals (group size varied from 3 to 12). All tests were administered in paper and pencil format. On the very rare occasion a term was not understood, the experimenter gave a dictionary definition except when respondents were answering the verbal
comprehension questionnaire. In this case, the experimenter informed the respondent that he was not allowed to give a definition.

When participants had finished one questionnaire, they waited until all individuals in their experimental session had finished answering that questionnaire before receiving the next questionnaire. When all individuals in the session had completed all questionnaires, participants were debriefed. The questionnaires took a total of 1.25 to 1.5 hours to complete (no break was provided).

In addition, 52 participants of the original sample were randomly selected to complete the moral comprehension questionnaire again 6 weeks later. This took 30 minutes to 1 hour to complete.

Counterbalancing

The following variables were counterbalanced across participants: 1) whether they answered the verbal comprehension questionnaire or moral questions (i.e., the DIT and the moral comprehension questionnaires) first; and 2) whether, amongst the moral questions, they answered the DIT or the moral comprehension questionnaire first.

Results

To test, Hypothesis 1, Cronbach’s Alpha ($\alpha=0.77$) was calculated for the verbal comprehension questionnaire across the combined pool of vocabulary and esoteric analogies items for all 115 respondents. Thus, the verbal comprehension questionnaire appears to exhibit sufficient reliability.
Temporary MCQ Scores

Thornton et al. (1991) noted participants find answering moral comprehension questions “cumbersome” (Thornton et al., p. 562). Participants in Study 3 had additionally reported to the experimenter that they felt fatigued at the end of the study. Because of this and the fact that it was hoped that the full length DIT could be employed to measure moral reasoning in Study 4 (where various hypotheses would be tested), a shorter moral comprehension instrument was deemed preferable to a longer instrument.

Nevertheless, brevity is less important than reliability and validity and consequently it was decided to first analyse the reliability and validity of all the questions in the MCQ. Once this was done, an attempt to construct a shortened version would be undertaken if and only if the full version showed adequate reliability and validity. This shortened version would be based on a sub-set of these questions with composition of this sub-set being determined by examining which questions appeared to be most reliable and valid. As discussed below, it turns out this was possible. To avoid confusion, the MCQ scores derived from all the items shall be referred to as Temporary MCQ scores (utilising all 36 items answered by respondents) whereas MCQ scores constructed post-hoc (utilising a 24 item subset of the items answered by respondents) shall be referred to as Final MCQ scores.

To test Hypothesis 2 for Temporary MCQ scores, Cronbach’s Alpha (α=0.80) was calculated across the pool of item scores (i.e., after the sub-items had been proportioned). Due to incomplete answering, this figure was obtained across a pool of 113 respondents.
To test Hypothesis 3 for Temporary MCQ scores, test-retest reliability of those participants who answered the MCQ twice was calculated. For the 51 subjects, the correlation between scores on the moral comprehension questionnaire answered 6 weeks apart was $r(51)=0.79$ ($p<0.001$). Thus, Temporary MCQ scores appear to demonstrate sufficient reliability.

Table 6.3 presents the correlation matrix for Temporary MCQ scores as well as verbal comprehension and moral reasoning measures. Table 6.3 reveals that in support of Hypotheses 4 and 5, Temporary MCQ Scores were significantly correlated with both verbal comprehension and p scores ($r(115)=.63; p<0.001$ and $r(115)=.42; p<0.001$ respectively).

Additionally, support of Hypothesis 4 was found when verbal comprehension was controlled for as Temporary MCQ scores were still significantly correlated with p scores ($r(115)=.33; df=112; p<0.001$). Moreover, in support of Hypothesis 5, when p scores were controlled for, Temporary MCQ scores remained significantly correlated with verbal comprehension scores ($r(115)=.59; df=112; p<0.001$). It is also worth noting that when Temporary MCQ scores were controlled for, p scores were not significantly correlated with verbal comprehension ($r(115)=.01; df=112; p>0.9$). Thus, Temporary MCQ scores have satisfied all the reliability and validity hypotheses set for them.

**Final MCQ Scores**

Temporary MCQ Scores correlated significantly greater with verbal comprehension scores than they did with p scores ($z=2.31; p<0.05$). Because of this and the high reliability of the moral comprehension scale, it was decided that the best
Table 6.3

*Study 3 Intercorrelations Between the Temporary MCQ Score and Verbal Comprehension and Moral Reasoning Measures*

<table>
<thead>
<tr>
<th>Measure</th>
<th>Verbal Comprehension&lt;sup&gt;2&lt;/sup&gt;</th>
<th>P Score&lt;sup&gt;3&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temporary MCQ Score&lt;sup&gt;1&lt;/sup&gt;</td>
<td>.63***</td>
<td>.42***</td>
</tr>
<tr>
<td>Verbal Comprehension&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
<td>.27**</td>
</tr>
</tbody>
</table>

<sup>1</sup> Temporary MCQ Scores measure moral comprehension and represent scores calculated using all 36 items of the MCQ administered in Study 3.

<sup>2</sup> Verbal Comprehension scores were obtained using Vocabulary and Esoteric Analogies tests.

<sup>3</sup> P Scores represents the proportion of postconventional reasoning endorsed by respondents and was calculated from the DIT Short Form.

** *p<0.01, *** *p<0.001
approach to creating a “Final MCQ” was to delete those items that seemed to weigh heavily on verbal comprehension as opposed to moral reasoning. Details of the precise procedure are provided in Appendix C.

Cronbach’s Alpha ($\alpha=0.77$) was calculated for Final MCQ scores satisfying Hypothesis 2 (Hypothesis 1 involved the reliability of the verbal comprehension measure and hence altering the way MCQ scores are calculated will not affect it). Hypothesis 3 was supported by the finding that the test-retest reliability of Final MCQ scores was ($r(51)=0.76; p<0.001$). Thus, Final MCQ scores display sufficient reliability.

Validity Correlations obtained with Final MCQ scores are presented in Table 6.4 and reveal that the revised questionnaire demonstrates the same pattern of correlations as the original questionnaire (cf Table 6.3). When verbal comprehension was controlled for, Final MCQ scores remained significantly correlated with p scores ($r(115)=.40; df=112; p<0.001$). Thus, Hypothesis 4 was supported. Additionally, supporting Hypothesis 5, Final MCQ scores remained significantly correlated with verbal comprehension, when p scores were controlled for ($r(115)=.53; df=112; p<0.001$). Thus, Final MCQ scores satisfy all of the validity hypotheses.

Consequently, Final MCQ scores demonstrate quite similar reliability and validity findings as Temporary MCQ scores. Therefore, the MCQ to be employed in Study 4 will only consist of those items used to calculate Final MCQ scores resulting in a one-third reduction in MCQ length between studies 3 and 4.
Table 6.4

**Correlations Between the Final MCQ Score and Verbal Comprehension and Moral Reasoning Measures**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Verbal</th>
<th>P Score&lt;sup&gt;3&lt;/sup&gt;</th>
<th>Stage 4+P Score&lt;sup&gt;4&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final MCQ Score&lt;sup&gt;1&lt;/sup&gt;</td>
<td>.58***</td>
<td>.47***</td>
<td>.30**</td>
</tr>
<tr>
<td>Verbal</td>
<td></td>
<td>.27**</td>
<td>.18</td>
</tr>
<tr>
<td>Comprehension&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P Score&lt;sup&gt;3&lt;/sup&gt;</td>
<td></td>
<td></td>
<td>.58***</td>
</tr>
</tbody>
</table>

<sup>1</sup> Final MCQ Scores measure moral comprehension and represent scores calculated using 24 items of the 36 items from the MCQ administered in Study 3.

<sup>2</sup> Verbal Comprehension scores were obtained using Vocabulary and Esoteric Analogies tests.

<sup>3</sup> P Scores measure preference for postconventional reasoning on the DIT.

<sup>4</sup> Stage 4+P Scores measure combined preference for postconventional and stage 4 reasoning on the DIT.

** **<sup>p</sup>&lt;0.01, ***<sup>p</sup>&lt;0.001
Post Hoc Analyses


As noted earlier in this thesis (e.g., see Sections 2.6 and 3.4), Emler and his colleagues (e.g., Emler et al., 1983, 1998; Emler & Stace, 1999) argue that stage 4 and postconventional moral reasoning are developmentally equivalent although both are more advanced than stage 1-3. While Study 1 and perhaps Study 2 cast doubt on the Social Communication Hypothesis posited by Emler et al. (1983, 1998), it is nevertheless fruitful to examine the validity of the MCQ using their theoretical framework.

Under this framework, the predictions involving moral comprehension will be the same except predictions involving p scores will be replaced by prediction involving the combination of stage 4 and postconventional moral reasoning because Emler and his colleagues view both stage 4 and postconventional reasoning as representative of advanced moral reasoning. Thus, stage 4 and p scores were summed to produce a stage 4+p score. While neo-Kohlbergians (e.g., Rest et al., 1999a, 1999b) might find such a cross-level combination of scores unusual, this is unproblematic to Emler and his colleagues because they interpret stage 4 and postconventional reasoning to be developmentally equivalent.

As displayed in Table 6.4, Final MCQ scores were significantly correlated with stage 4+p scores \(r(115)=.30; \ p<0.01\) and this correlation remained significant when verbal comprehension was controlled for \(r(115)=.24; \ df=112; \ p<0.01\). Additionally, when Stage 4+p reasoning was controlled for Final MCQ scores and verbal comprehension remained significantly correlated \(r(115)=.56; \ n=115; \ df=112; \ p<0.001\).
Thus, even if Emler and his colleagues’ position that stage 4 and postconventional reasoning are developmentally equivalent is correct, Final MCQ scores still appear to be a valid instrument.

**Discussion**

*Reliability and Validity of the Moral Comprehension Questionnaire*

The findings from Study 3 appear to demonstrate that the MCQ (hereafter any reference to the MCQ that does not explicitly mention “final” or “temporary” shall be a reference to the “Final MCQ”) is a reliable and valid instrument and hence can be employed in Study 4 to evaluate hypotheses that predict moral-cognitive difference between individuals or groups of individuals.

Satisfying hypotheses 2 and 3, the instrument has sufficient internal consistency and test-retest reliability. This is an improvement on the instrument(s)\(^\text{39}\) utilised by Rest et al. (1974) and Thornton et al. (1991). Hypothesis 1 – that the verbal comprehension questionnaire would demonstrate sufficient reliability was also supported.

In terms of predictive validity, Hypotheses 4 and 5 were both satisfied. Moral comprehension scores significantly correlated with both verbal comprehension and p scores. Additionally, controlling for the effects of either of these variables does not eliminate the correlation of the other variable with moral comprehension. Finally, even if stage 4+p reasoning is used as the developmental measure (as Emler et al., 1983, 1998

\(^{39}\) Thornton et al. (1991) used a modified version of Rest et al.'s (1974) instrument.
and Emler & Stace, 1999 argue it should), these same validity findings are found. Overall, having satisfied both validity and both reliability requirements set for them in Study 3 both in terms of p scores and stage 4+p scores, there is nothing in Study 3 to suggest that the use of MCQ scores as a measure of moral comprehension is problematic.

Final MCQ scores are calculated using two-thirds of the items used to calculate Temporary MCQ scores (24 items versus 36). This reduction in length does not appear to adversely impact the psychometric properties of the instrument. However, eliminating the items not utilised to calculate the Final MCQ Score from the questionnaire to be employed in Study 4 makes the questionnaire less exhausting for respondents. This is a useful property because it allows the full length DIT to be employed in Study 4.

Finally, as an aside, it should be noted that when moral comprehension is controlled for, verbal comprehension is not related to p scores. This is an extremely difficult result for researchers (such as Lykken, 1991 and Sanders et al., 1995) who argue that postconventional moral reasoning is merely verbal ability. Verbal comprehension appears to correlate with p scores only because of its relationship with moral comprehension. Thus, it seems there is something uniquely moral about moral reasoning – it is not just “normal” reasoning.

**Conclusion From Study 3**

Study 3 established the reliability and validity of a new Moral Comprehension Questionnaire (MCQ). The final form of the instrument demonstrates satisfactory internal consistency and test-retest reliability and is associated with the theoretically related concepts of moral reasoning and verbal comprehension.
This new Moral Comprehension Questionnaire utilises a greater variety of moral reasoning and a greater variety of methods of assessing comprehension than previous measures that had produced contradictory findings. The MCQ was employed in Study 4 to test several different predictions that the remaining hypotheses make about the relationship between moral comprehension, moral reasoning and liberalism-conservatism.
Chapter 7

Study 4

Using Moral Comprehension To Assess Moral-Cognitive Development

7.1 Introduction

Chapter 6 discussed the construction and validation of a new moral comprehension instrument (the MCQ). Because it was established that this instrument appears to demonstrate good reliability properties, Chapter 7 will utilise this instrument to test the Sophistication Hypothesis, Politically Mediated Development Hypothesis, Two Paths Hypothesis and Importance Hypothesis. These hypotheses all make differing predictions about the nature of the relationship between moral comprehension and both liberalism-conservatism and Kohlbergian moral reasoning and this chapter will involve an examination of the accuracy of these different predictions.

7.2 Moral Comprehension and the Sophistication Hypothesis

The Sophistication Hypothesis (e.g., Fishkin et al., 1973; Thoma, 1993; Thornton et al., 1991; see Section 3.2) postulates that the degree to which an individual utilises postconventional moral reasoning is predominantly determined by cognitive-developmental factors and, consequently, that the reason that liberals produce higher p
scores than conservatives is that liberals are more cognitively advanced (at least in the moral realm).

Consequently, the Sophistication Hypothesis makes two major predictions in regards to moral comprehension. Firstly, because the Sophistication Hypothesis assumes that the difference between liberals and conservatives is cognitive in nature, the hypothesis predicts that moral comprehension should be correlated with liberalism-conservatism (Thornton et al., 1991; Thoma et al., 1999). This is because if liberals are more moral-cognitively developed than conservatives then this difference should manifest itself in any moral-cognitive task and, as established in Study 3 (see Chapter 6), the MCQ appears to be such a task.

Secondly, if moral comprehension is controlled for then the correlation between moral reasoning and liberalism-conservatism should be eliminated because controlling for moral comprehension should control for important cognitive differences in the area of morality. This is because proponents of the Sophistication Hypothesis argue that a relationship between DIT scores and moral comprehension is evidence that DIT scores represent a developmental dimension (e.g., Rest et al., 1999a; Thoma et al., 1999). If moral comprehension is a marker for moral development and liberals are more morally developed than conservatives then liberals should have greater moral comprehension than conservatives. Indeed, because it was found in Study 3 that the Moral Comprehension Questionnaire (MCQ) was more strongly related to a clearly cognitive variable (i.e., verbal comprehension), it could be argued that, if anything the correlation between moral comprehension and liberalism-conservatism should be stronger than that between moral reasoning and liberalism-conservatism although it could also be argued that the stronger
The Sophistication Hypothesis’ second prediction assumes that it is the complete explanation for the relationship between liberalism-conservatism and moral reasoning. However, it is of course possible that the Sophistication Hypothesis merely provides one of multiple mechanisms that result in liberalism-conservatism being correlated with Kohlbergian moral reasoning. In such a scenario, moral comprehension would still be correlated with liberalism-conservatism but controlling for moral comprehension would not eliminate the correlation between liberalism-conservatism and moral reasoning.

As discussed earlier (e.g., Sections 2.7, 3.2, 6.2), the relationship between moral comprehension and liberalism-conservatism was investigated by Rest et al. (1974) and Thornton et al. (1991) but they found contradictory results and the moral comprehension measure they employed was psychometrically problematic. Chapter 7 intends to clarify the nature of the relationship between liberalism-conservatism and moral comprehension by utilising the MCQ. As discussed in Chapter 6, the MCQ appears to demonstrate better reliability than the Cooper (1972) measure ($\alpha>0.7$ compared to $\alpha=0.5$) and validity (in terms of independent associations with verbal comprehension and p scores).

### 7.3 Moral Comprehension and the Politically Mediated Development Hypothesis

The Politically Mediated Development Hypothesis (see Section 3.4), which was formulated for this thesis, postulates that although liberals and conservatives both develop the same moral-cognitive structure for understanding and constructing postconventional moral reasoning, conservatives do not utilise it even though liberals do.
Consequently, the Politically Mediated Development Hypothesis predicts that liberals and conservatives should not differ in terms of moral comprehension because each has the same cognitive capacity to understand and construct moral reasoning. The Politically Mediated Development Hypothesis additionally predicts that the correlation between moral comprehension and moral reasoning should be different for liberals and conservatives.

This is because the Politically Mediated Development Hypothesis argues that utilisation of postconventional reasoning is indicative of moral-cognitive development for liberals but not conservatives - a defining distinction between it and the Social Communication Hypothesis. Because the Politically Mediated Development Hypothesis postulates that conservatives do not automatically utilise postconventional reasoning once they obtain the necessary cognitive structure to construct postconventional arguments, it predicts that the correlation between DIT p scores and moral comprehension for conservatives should be weak. However, because the hypothesis postulates that liberals will automatically progress to utilising postconventional reasoning once they obtain the cognitive ability to construct postconventional arguments, it predicts that the correlation between p scores and moral comprehension should be strong for liberals.

7.4 Moral Comprehension and the Two Paths Hypothesis

The Two Paths Hypothesis (see Section 3.5), which was formulated for this thesis, argues that utilisation of postconventional reasoning is indicative of cognitive development for both liberals and conservatives. However, even before they can properly understand postconventional reasoning, liberals often endorse such reasoning.
Consequently, the Two Paths Hypothesis predicts that moral comprehension should not be associated with liberalism-conservatism and that controlling for moral comprehension should not reduce the correlations between moral reasoning and liberalism-conservatism. Additionally, because utilisation of postconventional reasoning is symptomatic of moral development for both liberals and conservatives, the correlation between moral comprehension and moral reasoning should not be different between liberals and conservatives.

The first prediction of the hypothesis assumes that the Two Paths Hypothesis provides the only mechanism resulting in liberalism-conservatism being correlated with Kohlbergian moral reasoning. If the Two Path Hypothesis provides one mechanism and the Sophistication Hypothesis provides another mechanism then moral comprehension will be correlated with liberalism-conservatism but controlling for moral comprehension will not greatly reduce the correlation between liberalism-conservatism and p scores (although there might be a small reduction).

### 7.5 Moral Comprehension and the Importance Hypothesis

The Importance Hypothesis (see Section 3.7; cf Sparks & Durkin, 1987) postulates that liberals reason in a more advanced fashion on liberal issues and conservatives reason in a more advanced fashion on conservative issues. The Importance Hypothesis was tested in Study 2. However, while the results of Study 2 did not appear to support it, the reliability of the DIT-CON was not ideal. However, as discussed in Chapter 6, the reliability of the MCQ is better than that of DIT-CON and this allows a fairer test of the Importance Hypothesis.
The Importance Hypothesis predicts that liberals have greater moral comprehension on issues important to liberals and conservatives have greater moral comprehension of issues important to conservatives because to actually reason in a more advanced manner\(^{40}\) requires the ability to comprehend what is being reasoned about (Kohlberg, 1969, 1984). Therefore the Importance Hypothesis postulates that the correlation between MCQ and liberalism-conservatism should differ if the test is separated into liberal issues and conservative issues.

Additionally, the Importance Hypothesis also predicts that the correlation between moral comprehension and postconventional reasoning should differ when only liberal-issue MCQ items are used to measure moral comprehension compared to when only conservative-issue MCQ items are used to measure moral comprehension. The reason for this is that conservatives should score higher on conservative-issue MCQ items but liberals should score higher on liberal-issue MCQ items (because the Two Paths Hypothesis postulates that individuals have greater moral-cognitive development on issues important to them). Hence, a correlation between liberal-issue MCQ items and p scores would be a correlation between two measures where liberals score high whereas a correlation between conservative-issue MCQ items and p scores would be a correlation between a measure where liberals score high and a measure where conservatives score high.

\(^{40}\) The Importance Hypothesis takes the stance on the endorsement issue (see Section 2.5) that what is measured by moral reasoning measures is the actual moral reasoning utilised by the individual to generate their moral judgements.
Finally, because the DIT mostly involves liberal issues (see Section 3.7), the Importance Hypothesis predicts that controlling for scores on liberal-issue MCQ items should greatly reduce the correlation between p scores and liberalism-conservatism. This is because the hypothesis postulates that the reason that liberals produce higher p scores on the DIT is that they are more moral-cognitively advanced on liberal issues. According to the Importance Hypothesis, controlling for the liberal-items sub-scale removes this possibility.

It should be noted that this final prediction of the Importance Hypothesis is actually compatible with the Sophistication Hypothesis because the Sophistication Hypothesis does not distinguish between issues important to conservatives and issues important to liberals. Consequently, a moral comprehension measure containing only liberal-issues should be just as an effective measure of moral-cognitive development as a moral comprehension measure containing both liberal issues and conservative issues.

**7.6 Hypotheses**

Hypotheses 1 and 2, amongst the hypotheses being tested in Study 4, are solely derived from the Sophistication Hypothesis. Hypothesis 1 is that liberalism-conservatism will be associated with moral comprehension and Hypothesis 2 is that differences in moral comprehension account for the relationship between moral reasoning and liberalism-conservatism.

Hypothesis 3 is that the relationship between moral reasoning and moral comprehension will be different for liberals and conservatives. Amongst the hypotheses
being examined in Study 4, this hypothesis is derived from the Politically Mediated Development Hypothesis solely.

Amongst the hypotheses being tested in Study 4, hypotheses 4 and 5 are derived solely from the Importance Hypothesis. Hypothesis 4 is that the correlation between moral comprehension and liberalism-conservatism will differ when moral comprehension is measured on MCQ items utilising liberal issues compared to when moral comprehension is measured by MCQ items using conservative issues. Hypothesis 5 is that the correlation between moral comprehension and moral reasoning will differ when moral comprehension is measured solely via liberal-issue MCQ items compared to when moral comprehension is measured solely via conservative-issue MCQ items.

Hypothesis 6 is consistent with both the Importance Hypothesis and the Sophistication Hypothesis (but not the Politically Mediated Development Hypothesis or Two Paths Hypothesis). This hypothesis is that the correlation between moral reasoning and liberalism-conservatism will be eliminated if moral comprehension measured by liberal-issue MCQ items is controlled for.

Hypotheses 1 to 6 describe different ways that moral comprehension could be involved in the relationship between moral reasoning and liberalism-conservatism and, consequently, two additional points need to be noted. Firstly, the Two Paths Hypothesis predicts that none of these hypotheses will be supported precisely because it postulates moral comprehension does not impact the relationship between liberalism-conservatism and moral reasoning. Thus, if none of these hypotheses are supported, it will be taken as evidence in favour of the Two Paths Hypothesis.
Secondly, as different hypotheses (of the relationship between Kohlbergian moral reasoning and liberalism-conservatism) are supported by different (experimental) hypotheses, it is entirely possible that not all the hypotheses will be supported (although it is conceivable that they all could be)\textsuperscript{41}. Such a finding would not in any way be problematic for Study 4 (and this thesis in general). Instead it would just be evidence that only some of the hypotheses tested in Study 4 provide mechanisms resulting in liberalism-conservatism being correlated with Kohlbergian moral reasoning.

\textbf{Method}

\textit{Design}

The study adopted a passive-observational design where individuals’ moral reasoning was the dependent variable and their moral comprehension and liberalism-conservatism were the predictor variables.

\textit{Participants}

Participants were 145 first year psychology students (54\% female) who participated as part of their first year psychology course. Ages ranged from 17-38 with a $M=19.69$ and a $SD=2.90$. Males had an age range of 17-33 with a $M=19.84$ and a $SD=2.85$. Females had an age range of 18-38 with a $M=19.55$ and a $SD=2.94$.

\textsuperscript{41} Such a scenario would merely be an indicator that all of the hypotheses tested in Study 4 appear to provide mechanisms resulting in liberalism-conservatism being related to Kohlbergian moral reasoning.
For the reasons presented in the Method-Participants section of Chapter 4, DIT-2 method reliability checks were employed as purging criteria resulting in the elimination of 5 participants. (see Appendix D for details).

Materials

Three questionnaires were employed. The first questionnaire was the full-length Defining Issues Test (DIT; Rest et al., 1974; see also Rest et al., 1999a). An overview of the DIT was presented in Section 1.6, but as a summary, the DIT requires participants to read moral dilemmas and indicate which moral reasoning considerations are most important (a list of 12 considerations is provided for each dilemma). The most important index calculated from the DIT is the p score, which measures the proportion of postconventional items endorsed by a respondent. While the DIT is typically reported to have a reliability in the 0.70s (Center for the Study of Ethical Development, 1990; Rest et al., 1974, 1999a), in Study 1, we obtained a reliability in the 0.60s (possibly through a restriction of range effect).

The second questionnaire utilised in Study 4 was a liberalism-conservatism questionnaire. This measure was a 28-item shortened form of the questionnaire utilised in studies 1 and 2. The questionnaire was shortened because, as a result of Study 3, we anticipated that participants could find Study 4 tiring and, as a result, wished to shorten the length of questionnaires where appropriate. Respondents were required to indicate whether or not they supported each of 28 political policies (e.g., death penalty, abortion) on a 5-point Likert scale (1=strongly disagree... 5=strongly agree). Over the study 1 data, this questionnaire has a Cronbach’s Alpha of $\alpha=0.85$ and correlates at $r=0.98$ with the
original version of the questionnaire. Additionally, the test shows the same validity trends as the full-length version (see Appendix D for details).

The third questionnaire was the Moral Comprehension Questionnaire (MCQ). The details of this questionnaire (which was termed the “Final MCQ” in Study 3), including validity findings, are presented at some length in Study 3. Briefly, the questionnaire has a Cronbach’s Alpha of $\alpha=0.77$ and a test-retest reliability of $r=0.76$ and predicts both verbal comprehension and moral reasoning when the other is controlled for.

All questionnaires are available in Appendix D.

**Procedure**

Participants signed up for this experiment via an internet-based bulletin board (Experimetrix) where all School of Psychology experiments at the University of Sydney are placed. The experimental description was “Participants will be required to answer a series of questions on political and social issues. They will be required to indicate whether or not they support given positions and evaluate certain features of given hypothetical situations as well as interpret certain viewpoints”.

Participants completed the questionnaire in groups with an average size of 5 individuals (group size varied from 1 to 10) in a room in the School of Psychology of the University of Sydney. All tests were administered in paper and pencil format. On the very rare occasion a term was not understood, the experimenter gave a dictionary definition.

When participants had finished one questionnaire, they waited until all individuals in their experimental session had finished answering that questionnaire before receiving
the next questionnaire. When all individuals in the session had completed all questionnaires, participants were debriefed. The questionnaires took a total of 1 to 1.5 hours to complete.

Counterbalancing

The following variables were counterbalanced across participants: 1) whether they answered the liberalism-conservative questionnaire or moral questionnaires (i.e., the DIT and the MCQ) first; and 2) whether, amongst the moral questionnaires, they answered the DIT or the MCQ first.

Results

Descriptive statistics for the main measure used in this experiment are provided in Table 7.1. These suggest that sufficient variability exists to examine correlations.

Correlations relevant to hypotheses 1-3 are presented in Table 7.2. Hypothesis 1 was supported by the finding that political scores were significantly correlated with MCQ scores ($r(140)=.17; p<0.05$).

Hypotheses 2-3 were tested via a multivariate regression of $p$ scores using MCQ scores, political scores and MCQ x political interaction scores as predictors$^{42}$. As

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$^{42}$ While Cohen (1983) and Cohen, Cohen, West and Aiken (2003) do not recommend a median split (but instead the regression interaction effect approach described above), an examination of Hypothesis 3 using a median split is provided in Appendix D.
Table 7.1

*Descriptive Statistics of the Theoretically Critical Measures From Study 4*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Scale Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>P¹</td>
<td>37.14</td>
<td>14.22</td>
<td>8.33</td>
<td>71.67</td>
<td>0 - 95</td>
</tr>
<tr>
<td>Political²</td>
<td>2.60</td>
<td>.43</td>
<td>1.54</td>
<td>3.93</td>
<td>1 - 5</td>
</tr>
<tr>
<td>MCQ³</td>
<td>.64</td>
<td>.10</td>
<td>.42</td>
<td>.92</td>
<td>0 - 1</td>
</tr>
</tbody>
</table>

¹ P scores measure the proportion of postconventional items endorsed by a respondent to the DIT.

² Political scores measure an individual’s liberalism-conservatism such that a higher score indicates greater conservatism. Note that where the sum of all items had been the measure in studies 1 and 2, the measure utilised in Study 4 was the mean of all items. The reason for this change was that, because the test had changed slightly (see Method-Materials section for details) scores were not directly comparable to those obtained in studies 1 and 2 and we wished to avoid any impression that they were directly comparable.

³ MCQ scores measure an individual’s moral comprehension as scored on the Moral Comprehension Questionnaire (MCQ).
Table 7.2

*Correlation Matrix of the Theoretically Critical Measures From Study 4*

<table>
<thead>
<tr>
<th>Measure</th>
<th>Political$^1$</th>
<th>MCQ$^2$</th>
<th>MCQ x Political$^4$</th>
</tr>
</thead>
<tbody>
<tr>
<td>P Score$^1$</td>
<td>-.38***</td>
<td>.29**</td>
<td>.06</td>
</tr>
<tr>
<td>Political$^2$</td>
<td>-.17*</td>
<td></td>
<td>.09</td>
</tr>
<tr>
<td>MCQ$^3$</td>
<td></td>
<td>-.02</td>
<td></td>
</tr>
</tbody>
</table>

Note. As recommended by Cohen et al. (2003), political scores, MCQ Scores and MCQ x Political interaction scores are centred.

1 P scores measure the proportion of postconventional items endorsed by a respondent to the DIT.

2 Political scores measure an individual’s liberalism-conservatism such that a higher score indicates greater conservatism.

3 MCQ scores measure an individual’s moral comprehension as scored on the Moral Comprehension Questionnaire (MCQ).

4 MCQ x Political denotes the variable formed by multiplying MCQ and Political Scores and tests whether these variables interact in terms of their effect on P scores.

* $p<0.05$, ** $p<0.01$, *** $p<0.001$
recommended by Cohen et al. (2003), scores on political scores, MCQ scores and MCQ x political interaction scores were centred (rescaled to a mean of 0) before the regression was performed. The results of the regression are presented in Table 7.3. In opposition to hypotheses 2 and 3 respectively, political scores were a significant predictor of p scores but MCQ x political interaction scores were not a significant predictor of p scores.

In preparation for tests of hypotheses 4 and 5, two new scores were calculated from the MCQ. These were MCQ scores calculated from only those questions that employed liberal issues (liberal-issue MCQ scores) or calculated from only those questions that employed conservative issues (conservative-issue MCQ scores). Correlations between the liberal-issue and conservative-issue MCQ scores and both p scores and political scores are present in Table 7.4.

Hypothesis 4 was tested by evaluating the correlations between the liberal-issue and conservative-issue MCQ sub-scales with political scores. As presented in Table 7.3, political scores were significantly correlated with liberal-issue MCQ scores ($r(140)=-.19; p<0.05$) but not conservative-issue MCQ scores ($r(140)=-.10; p>0.2$). However, these correlations did not significantly differ ($z=1.09; p>0.2$) when compared employing the procedure recommended by Meng et al. (1992). Thus, Hypothesis 4 was not supported. The relationship between moral comprehension and liberalism-conservatism does not appear to differ according to whether moral comprehension is measured on issues important to liberals or issues important to conservatives. The potential inconsistency here is addressed in the Discussion section of this chapter.
Table 7.3

*Predictors of Moral Reasoning in Study 4 as Revealed by Multiple Regression*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>P score(^1)</th>
<th>(\beta)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCQ Score(^2)</td>
<td></td>
<td>.232**</td>
</tr>
<tr>
<td>Political Score(^3)</td>
<td></td>
<td>-.346***</td>
</tr>
<tr>
<td>MCQ x Political Score Interaction(^4)</td>
<td></td>
<td>.10</td>
</tr>
<tr>
<td>(R^2)</td>
<td></td>
<td>.20***</td>
</tr>
<tr>
<td>(F)</td>
<td></td>
<td>11.56***</td>
</tr>
</tbody>
</table>

Note. As recommended by Cohen et al. (2003), political scores, MCQ Scores and MCQ x Political interaction scores are centred.

\(^1\) P scores measure the proportion of postconventional items endorsed by a respondent to the DIT.

\(^2\) MCQ scores measure an individual’s moral comprehension as scored on the Moral Comprehension Questionnaire (MCQ).

\(^3\) Political scores measure an individual’s liberalism-conservatism such that a higher score indicates greater conservatism.

\(^4\) MCQ x Political denotes the variable formed by multiplying MCQ and Political Scores and tests whether these variables interact in terms of their effect on P scores.

* * * \(p<0.05\), ** * * \(p<0.01\), *** * * * \(p<0.001\)
Table 7.4

*Correlation Matrix of Moral Comprehension Sub-Scale Correlations*

<table>
<thead>
<tr>
<th>Measure</th>
<th>Conservative Items$^1$</th>
<th>P Score$^3$</th>
<th>Political Score$^4$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberal Items$^1$</td>
<td>.47***</td>
<td>.31***</td>
<td>-.19*</td>
</tr>
<tr>
<td>Conservative Items$^2$</td>
<td>.19*</td>
<td></td>
<td>-.10</td>
</tr>
<tr>
<td>P Score$^3$</td>
<td></td>
<td></td>
<td>-.38***</td>
</tr>
</tbody>
</table>

$^1$ Liberal items refers to respondents’ scores on the liberal-item subscale on the MCQ – i.e., their moral comprehension when liberal issues are involved.

$^2$ Conservative items refer to respondents’ scores on the conservative-item subscale on the MCQ – i.e., their moral comprehension when conservative issues are involved.

$^3$ P scores measure the proportion of postconventional items endorsed by a respondent to the DIT.

$^4$ Political scores measure an individual’s liberalism-conservatism such that a higher score indicates greater conservatism.

* $p<0.05$, ** $p<0.01$, *** $p<0.001$
Hypothesis 5 was tested by examining the correlations between p scores and MCQ sub-scale scores. As displayed in Table 7.3, liberal-issue MCQ scores were significantly positively correlated with p scores \((r(140)=0.31; \ p<0.001)\) as were conservative-issue MCQ scores \((r(140)=0.19; \ p<0.05)\). These correlations were compared using the procedure recommended by Meng et al. (1992) and found not to significantly differ \((z=1.45; \ p>0.1)\). Thus, Hypothesis 5 was not supported. The relationship between moral comprehension and moral reasoning does not appear to differ according to whether moral comprehension is measured on issues important to liberals or issues important to conservatives.

Hypothesis 6 was tested by examining the correlation between political scores and p scores when liberal-issue MCQ scores had been controlled for. As revealed by Table 7.2, p scores were significantly correlated with political scores \((r(140)=-.38; \ p<0.001)\) and, in opposition to Hypothesis 6, this correlation remained significant when the MCQ liberal sub-scale was controlled for \((r(140)=-.34, \ df=137, \ p<0.001)\). Thus, controlling for moral comprehension on issues important to liberals does not appear to eliminate the correlation between moral reasoning and liberalism-conservatism.

**Discussion**

*Methodological Limitations*

Before the results of Study 4 are examined, the important methodological issue of the validity of MCQ needs to be discussed. The present study employs the MCQ to measure moral comprehension and hence moral-cognitive development. The conclusions
that are reached from Study 4 thus hinge on the validity of the MCQ as such a measure. In terms of measuring moral comprehension, Study 3 found that the MCQ was significantly correlated both p scores and verbal comprehension and remained so when the effects of the other variable was partialled out ($r(115)=.40; df=112; p<0.001$ and $r(115)=.53; n=115; p<0.001$ respectively; see Chapter 6). As discussed in Sections 6.3-6.5, this is precisely what would be expected out of a valid moral comprehension scale. Nevertheless, it is conceivable that future research may find that this scale is somehow flawed in which case the conclusions from this study could not be relied upon.

However, if the MCQ is a valid measure of moral comprehension, there still is the question of whether moral comprehension is an adequate measure/indicator of moral-cognitive development. Moral comprehension is not the complete sum of all moral cognition activities and thus it would be welcome if these results were replicated with a moral-cognitive task other than the MCQ. However, there are two reasons why using moral comprehension to measure moral-cognitive development is a plausible approach.

Firstly, neo-Kohlbergian theorists who talk about cognitive differences recommend the use of moral comprehension for this purpose. For instance, Narvaez (1998), Rest et al. (1999a) and Thoma et al. (1999) all argue that a relationship between p scores and moral comprehension is evidence that p scores are developmental and this is used by these authors as evidence of the DIT’s validity. Consequently, the use of moral

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43 Moral reasoning tasks such as the DIT and MJI also cannot be used because p scores are the dependent variable in this study. Hence, replacing the MCQ with the DIT or MJI would make moral reasoning both a predictor and the predicted variable.
comprehension as a marker of moral-cognitive development has historical precedent within the moral reasoning field.

Secondly, moral comprehension is essential for actual moral reasoning (as opposed to mere endorsement of moral reasoning; see Section 2.5). An attempt to analyse cognitive differences in moral reasoning (i.e., amongst liberals and conservatives) should involve a cognitive task that is related to moral reasoning because otherwise there is the possibility that any cognitive difference found is not applicable to moral reasoning. One cannot, however, construct any moral reasoning unless one has an understanding of the concepts that moral reasoning employs. Consequently, moral comprehension is very important for moral reasoning and it seems a plausible candidate for a moral-cognitive variable that affects moral reasoning.

**Implications For the Sophistication Hypothesis**

The results of Study 4 appear to suggest that while the Sophistication Hypothesis has some degree of support, it fails to account for a large proportion of the variability between liberalism-conservatism and postconventional moral reasoning.

The central prediction of the Sophistication Hypothesis was Hypothesis 1 namely that liberalism-conservatism would be correlated with moral comprehension. This hypothesis was supported by the finding that MCQ scores were significantly negatively correlated with political scores. Thus, it appears that, on the average, individuals who are more liberal do have a greater understanding of moral reasoning supporting the results of Thornton et al. (1991) but not Rest et al. (1974).
However, Hypothesis 2 (also predicted by the Sophistication Hypothesis) failed to gain support. Liberalism-conservatism and moral comprehension were independently associated with moral reasoning. Moreover, the correlation between liberalism-conservatism and moral reasoning is $r(140)=-.38$ ($p<0.001$) but correcting for moral comprehension only reduces it to $r(140)=-.35$ ($df=137; p<0.001$). Thus, the corrected correlation accounts for about 12% of the p score variability whereas the uncorrected correlation accounts for about 14% of variability. Therefore, controlling for moral comprehension only accounts for about 2% of p score variability or about 15% of the covariance between liberalism-conservatism and p scores. That this relationship appears to exist but appears relatively weak may also be a factor of why Thornton et al. (1991) observed it but Rest et al. (1974) did not. A weak relationship can be difficult to repeatedly observe because psychological experiments are often designed around finding at least a medium sized effect and even then often lack sufficient power (Cohen, 1992).

In summary, subject to the possible methodological limitations discussed earlier, the Sophistication Hypothesis appears to provide a mechanism that results in liberals endorsing more postconventional reasoning than conservatives but it does not appear to provide the main mechanism.

*Implications For the Politically Mediated Development Hypothesis*

The results of Study 4 do not bode well for the Politically Mediated Development Hypothesis. The main prediction made by the hypothesis was Hypothesis 3 namely that the correlation between moral comprehension and moral reasoning would be different for liberals compared to conservatives. The concept was that if conservatives (but not
liberals) choose to reason at a lower stage when they have the cognitive capacity to reason at a higher stage then moral comprehension should predict postconventional reasoning for liberals but not conservatives.

However, Hypothesis 3 was not supported by the finding that MCQ x Political interaction scores did not predict p scores independently of MCQ scores and Political scores. This implies that the relationship between moral comprehension and moral reasoning is not dependent on an individual’s liberalism-conservatism, which is the central claim of the Politically Mediated Development Hypothesis.

In summary, subject to the possible methodological limitations discussed earlier, Study 4 provides no evidence to support the Politically Mediated Development Hypothesis.

Implications For the Importance Hypothesis

Study 4 did not offer a great deal of support for the Importance Hypothesis. Hypothesis 4 was not supported by the finding that the correlation between the MCQ liberal subscale and political scores did not appear to differ to the correlation between the conservative subscale and political scores. It must, however, be noted that, of the two subscales, only the liberal subscale was significantly correlated with liberalism-conservatism. This may have arisen because the correlation between the whole MCQ and political scores was only marginally significant. Regardless, this finding does not support the Importance Hypothesis because it suggests that the relationship between
moral comprehension and liberalism-conservatism is not based on whether liberal or conservative issues are employed to measure moral comprehension. It is difficult to reconcile this with the central tenet of the Importance Hypothesis namely that liberals are more morally advanced on liberal issues and conservatives are more morally advanced on conservative issues.

Hypothesis 5 was not supported by the finding that the correlation between moral comprehension and moral reasoning did not significantly differ between the liberal and conservative subscales of the MCQ. Because the dilemma content of the DIT has a liberal bias (see Section 3.7), the Importance Hypothesis predicts that it should correlate greater with a measure of moral comprehension involving liberal issues. However, this finding indicates that this is not the case.

Hypothesis 6 was not supported by the finding that the correlation between moral reasoning and liberalism-conservatism remained significant when scores on the liberal subscale of the MCQ were controlled for. This argues against the Importance Hypothesis because it postulates that the reason that liberals reason more postconventionally on the DIT is because they are more morally advanced on liberal issues (see Sparks & Durkin, 1987). However, controlling for the liberal subscale on the MCQ should eliminate this extra advancement that liberals have.

Overall, subject to the possible methodological limitations discussed earlier, Study 4 does not provide a great deal of support for the Importance Hypothesis.

The correlation for the whole scale was .17. The correlation for the liberal-issue items was .19. The correlation for the conservative-issue items was .10.
Implications For The Two Paths Hypothesis

Because the Two Paths Hypothesis postulates that the reason that p scores are correlated with liberalism-conservatism is independent to the reason that p scores are correlated with moral comprehension (i.e., each correlation represents a different “path” to high p scores; see Section 3.5), the fact that Hypotheses 2-6 were not supported counts as evidence in favour of it. This is because Hypotheses 2-6 examine different mechanisms by which moral comprehension could be influencing the relationship between Kohlbergian moral reasoning and liberalism-conservatism.

However, Hypothesis 1 was supported and hence some relationship between moral comprehension and liberalism-conservatism is indicated. Thus, the Two Paths Hypothesis cannot be the sole mechanism for explaining the relationship between moral reasoning and liberalism and conservatism. However, as explained in Section 7.4, the fact that Hypothesis 1 is supported but Hypothesis 2 is not, suggests that both the Sophistication and the Two Paths Hypotheses have elements of validity. The implications of this will be discussed in depth in Chapter 9, however, for the moment, the main point is that, as discussed in the “Implications For the Sophistication Hypothesis” section above, the effects of the Sophistication Hypothesis’ mechanism account for only a small proportion of the covariation in scores between liberalism-conservatism and postconventional moral reasoning. Thus, the Two Paths Hypothesis seems to be the more powerful of the two mechanisms.

To the extent permitted by the possible methodological limitations discussed earlier, Study 4 appears to provide some support for the Two Paths Hypothesis.
Study 4 Conclusions

Study 4 examined the possible ways in which moral comprehension might be partially or fully responsible for the relationship between Kohlbergian moral reasoning and liberalism-conservatism. In doing so, it allowed that the testing of several hypotheses that predicted that liberals and/or conservatives might reason in a more advanced manner under one circumstance or another.

A small direct relationship between moral comprehension and liberalism-conservatism was found but no other effects of moral comprehension on the relationship between Kohlbergian moral reasoning and liberalism-conservatism were observed. As a result, no support was found for the Importance Hypothesis or the Politically Mediated Development Hypothesis.

Because a direct relationship between moral comprehension and liberalism-conservatism was observed, some support was gathered for the Sophistication Hypothesis. However, the fact that this relationship was small suggests that Sophistication Hypothesis provides only a minor mechanism. This combined with the lack of support for hypotheses 2-6 additionally suggests that, subject to issues of methodology, the Two Paths Hypothesis provides the major mechanism underlying the correlation between liberalism-conservatism and Kohlbergian moral reasoning.

Study 4 concludes the empirical investigation of the relationship between Kohlbergian moral reasoning and liberalism-conservatism. Before the general implications of the overall results of this thesis are discussed (see Chapter 9), a final evaluation of each of the competing hypotheses will be performed in the next chapter.
Chapter 8

An Evaluation of the Competing Hypotheses

8.1 Introduction

Chapter 7 completed the empirical examination of hypotheses explaining the relationship between Kohlbergian moral reasoning and liberalism-conservatism. Chapter 8 provides this thesis’ final evaluation of all hypotheses by examining how successfully each hypothesis has predicted results throughout the thesis. Hence, the purposes of this chapter are to integrate findings across the four studies for each of the hypotheses and, consequently, to enable comparisons between hypotheses in terms of how valid they appear to be.

8.2 Methodological Limitations

Before reviewing the evidence before and against each hypothesis, it is important to review the limitations that may have affected this thesis’ findings. One limitation affecting all four studies is that participants in each study were all first-year psychology students and thus the samples employed in studies 1-4 may not be completely representative of the population at large. The utilisation of university students as participants in this area of research is not unusual (e.g., Barnett et al., 1995; Emler et al., 1983, 1998; Sparks & Durkin, 1987) and thus, while replication of this thesis’ results in the wider community would be desirable for the sake of establishing a broader applicability of findings, employing such a sample is consistent with prior research
meaning that differences between samples are less likely to be an issue when integrating this thesis’ results with those from published research prior to this thesis.

Because studies 1-4 were questionnaire-based, other methodological issues concern the validity of questionnaires. The DIT was employed in studies 1, 3 and 4 as a measure of moral reasoning. Validity information about the DIT was reviewed in Section 1.6 but, as discussed in the same section, a number of authors (e.g., Emler et al., 1983, 1998; Lykken, 1991; Sanders et al., 1995) have raised challenges to the DIT’s validity. One of the “side effects” of this thesis’ research is that it has been able to empirically evaluate these challenges and, as discussed in Section 9.3, they do not seem to have been supported. Nevertheless, because the hypotheses tested in this thesis are attempting to explain why Kohlbergian moral reasoning is related to liberalism-conservatism, the applicability of this thesis’ results are limited to the extent that the DIT is a valid measure of Kohlbergian moral reasoning. It should also be noted that in Study 1, the results obtained may have been affected by a Cronbach’s Alpha of $\alpha=0.62$ although this may have been due to a restriction of range of effect (as discussed in the Replicating Previous Results subsection of the Chapter 4 Discussion section) and is not greatly below $\alpha=0.70$.

Similarly, many results in this thesis are dependant on the reliability and validity of the scale employed, in studies 1, 2 and (in a slightly modified form; see Method-Materials section of Chapter 7) 4, to measure liberalism-conservatism. This questionnaire displayed reliability better than $\alpha=0.80$ in all three studies and, in Study 1 (where the validity of the measure was examined), was found to significantly correlate with voting intention and self-perceived liberalism-conservatism ($r(134)=0.36; p<0.001$
and $r(132)=0.34; \ p<0.001$ respectively). Thus, some support has been found for the validity of this measure.

Potential methodological issues specific to each study also need to be discussed. The PIC study was an essential measure employed in Study 1. Consequently, the conclusions reached from Study 1 concerning the moral reasoning of liberals and conservatives when an indirect, non-ipsative measure of moral reasoning is utilised are dependent on the validity of the PIC. In Study 1 (see Section 4.7), several validity hypotheses were set for PIC scores and they satisfied every one (see Results section of Chapter 4). Thus, while evidence supporting the validity of PIC scores was observed in Study 1, subsequent evidence challenging their validity would endanger the conclusions from that study. However, the Cronbach’s Alpha of the Perceived Illegality and Perceived Immorality scores was not quite $\alpha=0.70$ ($\alpha=0.69$ and $\alpha=0.64$ respectively) so it is possible that PIC score results may have been affected by the reliability of the instrument although this would not be expected to have had too large an effect because the reliabilities in question were very close to $\alpha=0.70$.

A critical measure used in Study 2 was the DIT-CON. This questionnaire was designed to be a version of the DIT employing conservative issues. Unfortunately, the reliability of the instrument was low ($\alpha=0.41$). As discussed in the Results section of Chapter 4, Guildford’s (1954) correction suggests that the results of Study 2 were obtained in spite of the instrument’s low reliability rather than because of it. However, the reliability issue is potentially serious and this thesis consequently regards conclusion reached from Study 2 as the most tenuous of this thesis’ findings.
Because the purpose of Study 3 was actually the validation of the MCQ for Study 4, the main methodological issue concerning Study 4 is actually how successful Study 3 was in establishing the validity of this questionnaire. As discussed earlier (e.g., in the Discussion-Methodological Limitations section of Chapter 7), there are two sub-issues that need to be discussed here. The first issue is whether the MCQ is a valid measure of moral comprehension. In Study 3, the MCQ was found to be both a “moral” instrument and a “comprehension” instrument due to the fact that it predicted p scores when verbal comprehension had been controlled for ($r(115)=0.40; df=112; p<0.001$) and predicted verbal comprehension when p scores had been controlled for ($r(115)=0.53; df=112; p<0.001$). Consequently, evidence that the MCQ was a valid measure of moral comprehension was found. Nevertheless, it must be remembered that if future research finds that the MCQ does not appear to be a valid measure of moral comprehension then this undermines the conclusions reached from the results of Study 4.

The second issue concerns whether it is appropriate to employ moral comprehension as a measure of moral-cognitive development. It is conceded that the conclusions from Study 4 depend on the appropriateness of such an approach. As discussed in the Discussion-Methodological Limitations section of Chapter 7, there are two reasons why this approach has been taken. Firstly, such an approach is favoured by neo-Kohlbergians (e.g., Narvaez, 1998; Rest et al., 1999a; Thoma et al., 1999) who argue that correlations with moral comprehension are evidence that the DIT is a developmental variable. Secondly, in order to construct moral reasoning, moral comprehension is essential and thus moral comprehension is a moral-cognitive activity that is intimately related to moral reasoning.
8.3 Understanding the Evaluation of Hypotheses

Having discussed possible methodological limitations of the studies in this thesis, this chapter now turns its attention to discussing the implications of those studies. Each of the sections in the rest of this chapter (other than Section 8.11 which provides the overall conclusions from the chapter) analyses the implications of the results of studies 1-4 for one hypothesis. To facilitate cross-hypothesis comparisons, the format of each section is similar. Each section begins with a brief recapitulation of the hypothesis and how it relates to prior research. After this, with the exception of the Ipsative Hypothesis (see Section 8.10 for an explanation), three predictions arising from the hypothesis are examined in terms of the results of this thesis. Finally, a conclusion is reached as to the extent to which the results of this thesis support this hypothesis.

It should be noted that sometimes a prediction arises from multiple hypotheses (or a prediction arising from one hypothesis is the opposite to a prediction arising from another hypothesis). This is because the hypotheses often share some feature in common. Table 8.1 provides a tabulation of the overlapping predictions. Note that two hypotheses, one with a “yes” prediction on one of the issues and one with a “no” prediction on the same issue, actually overlap because the prediction is being tested using the same results.

In cases of prediction overlap, the results addressing the prediction will be fully discussed the first time the prediction arises but only briefly discussed (with reference to full discussion in the earlier section) when it subsequently re-arises.
Table 8.1

*Prediction Overlap*

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Prediction Overlap</th>
<th>All Measures(^1)</th>
<th>Interaction Effect(^2)</th>
<th>Moral Comprehension(^3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sophistication</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Politically Mediated</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Development</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two Paths</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Breadth of Reasoning</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Breadth of Reasoning Hypothesis predictions for Independent Effects and Moral Comprehension were not examined as central predictions of this hypothesis because this hypothesis had other theoretically salient features to examine; two cells in the table have been left blank to indicate this. Hypotheses not present in this table predicted “no” for All Measures and, in each case, predictions focussed on how those hypotheses postulated the relationship would vary with different moral reasoning instruments.

1 All Measures refers to whether the hypothesis predicts that the relationship between liberalism-conservatism and Kohlbergian moral reasoning should occur regardless of moral reasoning instrument.

2 Interaction Effect refers to whether the hypothesis predicts that moral comprehension and liberalism-conservatism have an interactive effect on moral reasoning.

3 Moral Comprehension refers to whether the hypothesis predicts that moral comprehension explains the relationship between moral reasoning and liberalism-conservatism.
8.4 Evaluation of the Sophistication Hypothesis

The Sophistication Hypothesis (e.g., Fishkin et al., 1973; Thoma, 1993; Thornton et al., 1991; see Section 3.2)\textsuperscript{45} postulates that the reason that measures of Kohlbergian reasoning, such as the DIT and MJI, are correlated with liberalism-conservatism is because liberals are more cognitive-developationally advanced than conservatives in the moral realm. Liberals not only appear to, but actually do, utilise more advanced moral reasoning than conservatives as a result of being more moral-cognitively advanced than them.

The Sophistication Hypothesis has the advantage of continuing the tradition (at least dating to Piaget, 1932/1968) of examining changes in moral judgement/reasoning in terms of cognitive development. The DIT does correlate with many cognitive measures and p scores do seem to increase in many cases when cognitive development occurs (see Rest, 1986; Rest et al., 1999a; Thoma et al., 1999 for reviews). While that does not prove that moral reasoning differences between liberals and conservatives are cognitively based, it does bequeath it plausibility.

The first prediction made by the Sophistication Hypothesis tested in this thesis is that liberals should appear to reason more postconventionally whilst conservatives should appear to reason more non-postconventionally on all moral reasoning instruments. If liberals appear more morally developed than conservatives because they actually are more morally developed then clearly this difference cannot only be observed on a limited selection of moral reasoning measures.

\textsuperscript{45} See Section 3.3 for criticism of the Relative Sophistication Hypothesis.
As discussed in Section 2.3, prior research appears to support this prediction. Nevertheless, the DIT and MJI both contain potentially problematic features. As noted by Emler et al. (1998) and discussed in Section 3.10, both measures are scored somewhat ipsatively (the DIT less so than the MJI). Thus, any differences in moral reasoning between liberals and conservatives may be greatly magnified by the scoring procedure. Study 1 overcame this limitation by constructing the PIC score which non-ipsatively measured endorsement of some stage 4 reasoning. Similar to the correlation between conservatism and stage 4 reasoning that is often observed on the DIT (e.g., Feather, 1988; Emler et al., 1983, 1998; Rest et al., 1974), PIC scores were significantly correlated with political scores ($r(133)=0.33; p<0.01$) suggesting that ipsativity is not why scores on moral reasoning instruments are associated with liberalism-conservatism.

Another potentially problematic feature of studies prior to this thesis is, as discussed in Section 5.2, that the dilemmas employed by Kohlbergian measures such as the DIT and MJI mostly consist of issues important to liberals as opposed to issues important to conservatives. Given that Sparks and Durkin (1987) found evidence that the importance that people place on postconventional reasoning depends on whether such reasoning is compatible with their political viewpoints, the possibility arises that liberals might only appear to reason more postconventionally because of the dilemma content bias of moral reasoning instruments. Study 2 analysed this issue by creating the DIT-CON. This was a version of the DIT where the dilemmas employed were those involving issues important to liberals. Once again liberals produced higher $p$ scores than conservatives ($r(150)=-0.33; p<0.001$) suggesting that the dilemma content bias does not explain why scores on moral reasoning instruments are related to liberalism-
conservatism. Thus, given that neither of these objections to the findings of prior research appears to be valid, the first prediction of the Sophistication Hypothesis appears supported.

The second prediction of the Sophistication Hypothesis tested in this thesis is that liberals and conservatives should differ in terms of moral comprehension and that this difference should explain the difference in moral reasoning found between liberals and conservatives. The Sophistication Hypothesis postulates that the moral reasoning processes of liberals are more cognitive-developmentally advanced than those of conservatives. Hence, it also postulates that liberals should perform better than conservatives on any moral reasoning based cognitive task. Because moral comprehension is necessary to actually construct moral reasoning (as opposed to merely endorse it; see Section 2.5), moral comprehension had been the focus (e.g., Narvaez, 1998; Rest et al., 1969, 1974; Thornton et al., 1991; Walker et al., 1984). As described in Section 6.2, however, many of these studies employed subjective and indirect measures of moral comprehension. The one direct, objective measure of moral comprehension was the Cooper (1972) measure used by Rest et al. (1974) and, in a slightly modified form, Thornton et al. (1991). As noted earlier (e.g., Section 6.2), these two studies produced contradictory results. Thornton et al. (1991) found the moral comprehension was related to liberalism-conservatism but Rest et al. (1974) found that the variables were unrelated.

In an attempt to resolve this apparent contradiction, a new and psychometrically improved\textsuperscript{46} Moral Comprehension Questionnaire (MCQ) was constructed in Study 3.

\textsuperscript{46} Compared to the Cooper (1972) measure.
Study 4 utilised this instrument and it was found that MCQ scores and political scores were indeed correlated. However, the correlation observed in Study 4 was a small correlation ($r(140)=-0.17; p<0.05$) and controlling for this correlation failed to eliminate or greatly reduce the size of the correlation between p scores and liberalism-conservatism. Thus, while this second prediction of the Sophistication Hypothesis is supported to the extent that moral comprehension does underlie the part of the relationship between Kohlbergian moral reasoning and liberalism-conservatism, the support is relatively weak.

The third prediction of the Sophistication Hypothesis tested in this thesis is that moral comprehension and liberalism-conservatism should not have an interactive effect on moral reasoning. The Sophistication Hypothesis postulates that liberals score higher than conservatives solely because they are more morally advanced. Comparing liberals to conservatives in terms of moral reasoning is simply comparing high and low morally advanced individuals. Hence, it is the relationship between moral development (as measured by moral comprehension) and moral reasoning that is the key relationship – liberalism and conservatism are just functioning as proxies for high and low moral development. Consequently, the Sophistication Hypothesis predicts that the relationship between moral comprehension and moral reasoning should not differ for liberals and conservatives because the effects of liberalism-conservatism on moral reasoning are merely part of the effects of moral development on moral reasoning.

Study 4 examined this prediction by analysing whether there was an interaction effect present on a multiple regression of p scores using MCQ scores and political scores as predictors. This interaction effect was not significant ($\beta=0.10; p>0.2$) indicating that
moral comprehension and moral reasoning do not appear to be differently related for liberals compared to conservatives. Thus, the third prediction of the Sophistication Hypothesis was supported.

In summation, subject to the methodological limitations discussed in Section 8.2, with two predictions completely supported and another partially supported, this thesis offers some support that the Sophistication Hypothesis provides a mechanism underlying the relationship between Kohlbergian moral reasoning and liberalism-conservatism. However, because the support for the second hypothesis was weak, the Sophistication Hypothesis cannot be the mechanism or even a strong mechanism underlying the relationship.

### 8.5 Evaluation of the Social Communication Hypothesis

The Social Communication Hypothesis (e.g., Emler, 1983; Emler et al., 1983, 1998; see Section 3.4)\(^{47}\) postulates that the relationship between Kohlbergian moral reasoning and liberalism-conservatism is simply a product of liberals and conservatives post-hoc endorsing (or, in the case of the MJI, invoking) politically appropriate moral reasoning responses to support their moral judgements. Individuals endorse moral reasoning that is compatible with their self-perceived political identity.

The Social Communication Hypothesis offers a plausible alternative to the standard Kohlbergian interpretation of scores on moral reasoning instruments because such instruments are not politically neutral. For instance, Emler and his colleagues have

\(^{47}\) See Section 3.5 for criticism of the Emler and Stace (1999) version of this hypothesis.
repeatedly observed that individuals consider DIT stage 5 items as politically liberal and DIT stage 4 items as politically conservative (e.g., Emler et al., 1983, 1998; Emler & Stace, 1999; Reicher & Emler, 1984). Thus, it is entirely conceivable that differences between liberals and conservatives on the DIT arise from political rather than moral-cognitive differences.

The first prediction of the Social Communication Hypothesis tested here is that if liberals and conservatives are not required to indicate what moral reasoning they are using (e.g., via endorsement on the DIT or production on the MJI), then an implicit measure of their moral reasoning processes should not produce a moral reasoning difference between liberals and conservatives. This is because Emler and his colleagues (1983, 1998) argue that it is the need to find politically appropriate moral reasoning to justify one’s moral judgements that causes apparent moral reasoning differences between liberals and conservatives. If candidate moral reasoning is not made explicit to the individual\footnote{Note that the MJI still makes potential moral reasoning explicit because respondents are thinking about such moral reasoning when they respond to the interviewer.} (i.e., in the moral reasoning instrument) then this process cannot occur and consequently there should not be the opportunity for liberals and conservatives to develop differences.

This prediction was tested in Study 1 where political scores were correlated with PIC scores ($r(133)=0.33; p<0.01$) indicating that conservatives more strongly associated the degree of an act’s illegality with the degree of that act’s immorality. This suggests differences between the moral reasoning processes of liberals and conservatives are

\footnote{Note that the MJI still makes potential moral reasoning explicit because respondents are thinking about such moral reasoning when they respond to the interviewer.}
present before they consider moral reasoning alternatives. Thus, the first prediction of
the Social Communication Hypothesis was not supported in this thesis. It should also be
noted the correlation between moral comprehension and liberalism-conservatism
observed in Study 4 ($r(140)=-0.17; p<0.05$) is another case where the moral reasoning
processes (moral comprehension being involved in the moral reasoning process) of
liberals and conservatives appear to differ even though they are not required to indicate
either by endorsement or production what moral reasoning they are using.

The second prediction of the Social Communication Hypothesis tested here is that
whether liberals or conservatives prefer postconventional reasoning depends on whether
that moral reasoning appears politically liberal or politically conservative. If moral
reasoning is merely a search for politically appropriate justification then making moral
reasoning more politically conservative should result in greater conservative endorsement
of it (and making it more politically liberal should result in greater liberal endorsement).

Study 2 examined this issue by constructing a version of the DIT (i.e., the DIT-
CON) where a liberal political position was consistent with stage 4 moral reasoning and a
conservative political position was consistent with postconventional moral reasoning.
The results of Study 2 indicate that liberalism was correlated with DIT-CON p scores
($r(150)=-0.33; p<0.001$). Thus, liberals still appear to prefer postconventional reasoning
(compared to conservatives) even when that reasoning produces outcomes they find
politically undesirable. Thus, the second prediction of the Social Communication
Hypothesis was not supported in this thesis.

The third prediction of the Social Communication Hypothesis tested here is that
the differences on postconventional reasoning do not represent a cognitive-developmental
dimension. The Social Communication Hypothesis rejects a cognitive-developmental interpretation of moral reasoning instrument results (at least involving stages beyond 3). Consequently, it predicts that cognitive-developmental differences should not be associated with moral reasoning differences.

This prediction was investigated in Study 4 via use of the MCQ that, in Study 3, had demonstrated itself to be a more clearly cognitive measure than the DIT. Here, p scores were found to be correlated with MCQ scores ($r(140)=0.29; p<0.01$) and, moreover, this correlation did not appear to differ between liberals and conservatives. Thus, for both liberals and conservatives, higher p scores appear to be associated with greater moral-cognitive ability. Consequently, it appears that the third prediction of the Social Communication Hypothesis was not supported by this thesis. It should also be noted that the correlation found between moral comprehension and liberalism-conservatism in Study 4 ($r(140)=-0.17; p<0.05$) is also inconsistent with this prediction.

In conclusion, subject to the methodological limitations discussed in Section 8.2, with none of its predictions supported, this thesis did not find any support for the Social Communication Hypothesis.

8.6 Evaluation of the Politically Mediated Development Hypothesis

The essence of the Politically Mediated Development Hypothesis (see Section 3.6) – a hypothesis constructed for this thesis – is that there is a dichotomy between the moral reasoning one can understand and the moral reasoning one utilises. Kohlberg (e.g., 1969, 1983; Colby et al., 1987) appears to assume that once an individual was able to comprehend and construct moral reasoning of a given stage, they would utilise that moral
reasoning to make their moral judgements. The Politically Mediated Development Hypothesis postulates that this is only true for liberals – conservatives continue using stage 4 (and possibly preconventional) reasoning even though they have the capacity to construct postconventional arguments.

The Politically Mediated Development Hypothesis has the advantage of acknowledging that the ability to comprehend and/or construct postconventional arguments is an indicator of moral development whilst acknowledging that political factors enter into whether those arguments are employed or not. Thus, the Politically Mediated Development Hypothesis is somewhat flexible allowing, for instance, political factors to strongly influence whether an individual uses postconventional or stage 4 reasoning (e.g., Emler et al., 1983, 1998) without removing the Kohlbergian notion that being able to construct postconventional arguments is a sign of moral development (e.g., Kohlberg, 1969, 1984; Rest et al., 1999a).

The first prediction made by the Politically Mediated Development Hypothesis tested here is that liberals should appear to utilise more postconventional reasoning than conservatives across all moral reasoning instruments. This prediction arises because the Politically Mediated Development Hypothesis does not postulate that the differences between liberals and conservatives arise because of the content or format of moral reasoning tasks. This prediction is exactly the same as the first prediction of the Sophistication Hypothesis and, as discussed in Section 8.2, appears to be supported.

The second prediction of the Politically Mediated Development Hypothesis tested in this thesis is that liberals and conservatives do not differ in terms of their ability to understand moral reasoning. Because conservatives are able to construct the same
breadth of moral arguments as liberals, the Politically Mediated Development Hypothesis postulates that they are not less morally developed than liberals. Because moral comprehension is integral to the construction of moral reasoning, the Politically Mediated Development Hypothesis thus predicts that liberals and conservatives should understand the same amount of moral reasoning. This prediction is the opposite to the second prediction of the Sophistication Hypothesis and, as discussed in Section 8.2, a weak relationship between MCQ scores and political scores was observed in Study 4 ($r(140)=-0.17; p<0.05$). However, because the observed relationship was weak, it is still possible that the Politically Mediated Development Hypothesis provides one of several mechanisms resulting in liberalism-conservatism being correlated with moral reasoning.

The third prediction of the Politically Mediated Development Hypothesis tested in this thesis, which goes to the heart of the hypothesis, is that the relationship between moral reasoning and moral comprehension is different for liberals and conservatives – i.e., moral comprehension and liberalism-conservatism have an interactive effect on moral reasoning. The Politically Mediated Development Hypothesis postulates that liberals utilise postconventional reasoning the moment they can understand it but conservatives do not. Consequently, it predicts that the relationship between moral reasoning and moral comprehension should differ between liberals and conservatives because sufficiently advanced moral comprehension results in liberals, but not conservatives, utilising postconventional reasoning. The opposite of this prediction was examined as the third prediction of the Sophistication Hypothesis. As discussed in Section 8.2, and in opposition to this third prediction of the Politically Mediated
Development Hypothesis, this thesis found no evidence that the relationship between moral reasoning and moral comprehension differs between liberals and conservatives.

Overall, subject to the methodological limitations discussed in Section 8.2, with its key prediction not supported and no other predictions fully supported, this thesis does not provide great support for the Politically Mediated Development Hypothesis.

### 8.7 Evaluation of the Two Paths Hypothesis

The fundamental tenet of the Two Paths Hypothesis (see Section 3.7) – a hypothesis constructed for this thesis – is that although both liberalism-conservatism and moral-cognitive development are related to endorsement of Kohlbergian moral reasoning, they are not related to each other. Actual postconventional moral reasoning (see Section 2.5) is developmental in nature but, independently of this, liberals endorse and produce more postconventional reasoning than conservatives on moral reasoning instruments.

One of the important features of the Two Paths Hypothesis is that it is able to explain seemingly disparate findings. For instance, the faking paradigm results (e.g., Barnett et al., 1995; Emler et al., 1983; see sections 2.4 - 2.8) can be explained in terms of effects on the political path whereas findings linking cognitive development to p scores (e.g., Davidson, 1979; Rest et al., 1974; Thoma, 1986; see Thoma et al., 1999) can be explained in terms of effects on the developmental path.

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49 As discussed in Section 2.8 (and originally by Emler et al., 1998), Barnett et al.’s (1995) extra anti-authoritarian items came from the New Left Scale.
The first prediction of the Two Paths Hypothesis tested in this thesis is that liberals should appear to reason more postconventionally than conservatives regardless of moral reasoning instrument. This prediction arises because the Two Paths Hypothesis does not postulate that the differences between liberals and conservatives arise because of issues in moral reasoning instruments. This prediction is the same as the first prediction of the Sophistication Hypothesis and, as discussed in Section 8.2, appears to be supported by the results of this thesis.

The second prediction of the Two Paths Hypothesis tested is that the relationship between moral comprehension and liberalism-conservatism is not responsible for the relationship between Kohlbergian moral reasoning and liberalism-conservatism. The key point of the Two Paths Hypothesis is that the effects of liberalism-conservatism on moral reasoning are independent of the effects of moral-cognitive development on moral reasoning. Moral comprehension and liberalism-conservatism should not be related because they represent two independent paths to apparent utilisation of postconventional reasoning. The opposite of this prediction was examined as the first prediction of the Sophistication Hypothesis. As discussed in Section 8.2, a weak relationship between MCQ scores and political scores was observed in Study 4 ($r(140)=-0.17; p<0.05$) but the correlation between $p$ scores and political scores remained significant when moral comprehension had been controlled for ($r(140)=-.35; df=137; p<0.001$). Thus, this prediction (i.e., from the perspective of the Two Paths Hypothesis) was partially supported.

The third prediction of the Two Paths Hypothesis tested in this thesis is that moral comprehension and moral reasoning are related to the same degree for both liberals and
conservatives – i.e., moral comprehension and liberalism-conservatism do not produce an interactive effective on moral reasoning. Because the Two Paths Hypothesis postulates that cognitive effects on moral reasoning endorsement/production are independent of political effects, the effects of the developmental path should be politically neutral. The relationship between moral comprehension and moral reasoning gauges the effects of the developmental path and, because the two paths are independent, hence should be the same for liberals and conservatives. This prediction is the same as the third prediction of the Sophistication Hypothesis and, as discussed in Section 8.2, Study 4 found support for this prediction.

In conclusion, subject to the methodological limitations discussed in Section 8.2, with two predictions supported and the third partially supported, this thesis provides some support for the Two Paths Hypothesis.

8.8 Evaluation of the Breadth of Reasoning Hypothesis

The Breadth of Reasoning Hypothesis – a hypothesis constructed for this thesis - does not so much provide a mechanism of why liberals appear to reason more postconventionally than conservatives as much as re-evaluate what the relationship between Kohlbergian moral reasoning and liberalism-conservatism is. The Breadth of Reasoning Hypothesis postulates that liberals use a greater breadth of moral reasoning than conservatives who are more narrow in their reasoning and generally prefer stage 4.

One of the recent developments in Kohlbergian theory has been the movement from a stage to schema-based approach (e.g., Rest et al., 1999a, 1999b). With such an approach, usage of lower stage reasoning can also be informative in regards to moral
development. The Breadth of Reasoning Hypothesis adopts such a framework by postulating effects across the entire Kohlbergian moral reasoning spectrum. This is in contrast to prior research involving Kohlbergian moral reasoning and liberalism-conservatism which has tended to focus on only postconventional and stage 4 reasoning (Barnett et al., 1995; Emler et al., 1998; Fishkin et al., 1973; see Section 2.3).

The first prediction of the Breadth of Reasoning Hypothesis tested in this thesis is that liberals should endorse more stage 2+3 reasoning than conservatives. If conservatives are dogmatically “stuck” in stage 4 but liberals are more open generally to different types of moral reasoning, then the differences between liberals and conservatives should extend beyond the stage 4 and postconventional differences that have been examined (see Section 3.3).

The first prediction was tested in Study 1 by examining whether DIT stage 2+3 scores were related to political scores. No significant relationship was found ($r(135)=0.09; p>0.2$) indicating that liberals do not appear to prefer more stage 2 and 3 reasoning than conservatives. Additionally, in Study 2, conservatism was actually positively associated with DIT-CON stage 2+3 scores ($r(150)=0.24; p<0.005$). Finally, it was not reported in Chapter 7 but Study 4 (using the DIT) also found no significant relationship between political scores and DIT stage 2+3 scores ($r(140)=0.11; p>0.1$). Thus, the first prediction of the Breadth of Reasoning Hypothesis was not supported by the results of this thesis.

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50 Because it was not relevant to the hypotheses that were being tested in Study 4.
The second prediction of the Breadth of Reasoning Hypothesis tested in this thesis is that conservatives should appear to be more consistent in their moral reasoning than liberals. If conservatives are rigidly stuck in stage 4 but liberals are not rigidly stuck in any stage then conservatives should diverge from stage 4 less often than liberals diverge from whatever stage each liberal uses the most often\(^{51}\). Hence, conservatives should appear more “stage consistent” than liberals.

The second prediction was tested by examining the relationship between DIT stage consistency scores (c scores; see Rest et al., 1997a) and liberalism-conservatism. Rest et al. (1997a) re-examined Rest et al.’s (1974) and Rest’s (1986) data and found some support for this prediction. However, only 3 of the 4 correlations were significant and the scales used were political toleration (Rest et al. 1974), political awareness (Rest, 1986) and a law and order scale (Rest et al., 1974; Rest, 1986), which are not entirely convincing as liberalism-conservatism scales. Thus, it seemed prudent to re-examine the issue with the liberalism-conservatism scale developed for this thesis (i.e., in Study 1). Study 1 did not find a significant relationship between political scores and DIT c scores \(r(135)=-0.08; p>0.3\) in opposition to the prediction. Although it was not reported in Chapter 7\(^{52}\), Study 4 also failed to find a significant relationship between c scores and political scores \(r(140)=-0.07; p>0.4\).

The third prediction of the Breadth of Reasoning Hypothesis tested in this thesis is that liberals should appear to reason more postconventionally than conservatives

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\(^{51}\) According to the Breadth of Reasoning Hypothesis, this will vary from liberal to liberal.

\(^{52}\) Because it was not relevant to the hypotheses that were being tested in Study 4.
regardless of the moral reasoning instrument employed (e.g., whether the task uses liberal or conservative issues, whether it is an endorsement or production task). This prediction arises because the Breadth of Reasoning Hypothesis does not postulate that the apparent moral reasoning differences between liberals and conservatives are caused by moral reasoning tasks. This prediction is the same as the first prediction of the Sophistication Hypothesis and, as discussed in Section 8.2, the results of this thesis appear to support this prediction.

In conclusion, subject to the methodological issues discussed in Section 8.2, with two of its three predictions not supported (and these two being the most critical predictions), this thesis does not provide a great deal of support for the Breadth of Reasoning Hypothesis.

8.9 Evaluation of the Importance Hypothesis

The Importance Hypothesis\(^{53}\) (see Section 3.9) arises from the liberal dilemma bias of the DIT and the work of Sparks and Durkin (1987) who observed that the absolute importance that individuals place on postconventional reasoning varies according to whether that reasoning produces outcomes consistent with their political opinions. The hypothesis postulates that the reason that liberals score higher on Kohlbergian

\(^{53}\) While the hypothesis has its origins in the research of Sparks and Durkin (1987), the Importance Hypothesis was first named in this thesis because this thesis is where the hypothesis was formalised from Sparks and Durkin’s (1987) observations.
instruments than conservatives is because those instruments typically employ dilemmas involving issues important to liberals.

The Importance Hypothesis has the advantage of being able to incorporate cognitive developmental findings about Kohlbergian measures such as the DIT (see Rest et al., 1999a for a review) without implying any overall cognitive advantage of liberals over conservatives. It is also very compatible with findings from moral intervention programs such as discussing moral issues leads to an increase in p scores (see Schlaefli et al., 1985 for a review) because people presumably discuss issues that are important to them more than they discuss issues that are not important to them.

The first prediction of the Importance Hypothesis tested in this thesis is that conservatives should appear to reason more postconventionally than liberals on a DIT-like test utilising dilemmas involving issues important to conservatives. The Importance Hypothesis predicts this simply because it postulates that an individual's moral reasoning will be more advanced on those issues that are politically important to him or her.

This prediction was tested in Study 2 where the DIT-CON, a DIT with a conservative dilemma bias, was employed. It was found that liberals still endorsed more postconventional reasoning on the DIT-CON than conservatives ($r(150)=-0.33; p<0.001$). Thus, this prediction was not supported. Additionally, conservatives seemed to express a preference for stage 2/3 reasoning ($r(150)=0.24; p<0.005$) as opposed to the stage 4 preference found in Study 1 indicating that, if anything, that they were less morally developed on conservative issues than they were on liberal issues.

The second prediction of the Importance Hypothesis tested in this thesis is that the relationship between moral comprehension and liberalism-conservatism should differ
according to whether the issues utilised in the moral comprehension measure are important to liberals or conservatives. This prediction arises because the Importance Hypothesis proposes that moral reasoning differences between liberals and conservatives are cognitive-developmental differences but relative to the political leaning of the moral reasoning subject matter. Moral reasoning development can essentially be split into development on issues that are (at least politically) important to us and development on issues that are unimportant to us.

This prediction was tested in Study 4 where correlations between moral comprehension and liberalism-conservatism were examined. The correlation between the conservative subscale of the MCQ and political scores did not significantly differ to the correlation between the liberal subscale of the MCQ and political scores ($z=1.09, p>0.2$). Thus, this prediction was not supported. Additionally, because controlling for MCQ scores failed to greatly decrease the correlation between p scores and political scores (regardless of whether the whole MCQ or either subscale was used), the notion that differences between liberals and conservatives are primarily cognitive (which the Importance Hypothesis predicts) seems erroneous.

The third prediction of the Importance Hypothesis tested in this thesis is that the relationship between moral comprehension and moral reasoning will differ according to whether or not both measures utilise a similar political content bias or not. For instance, a correlation between a moral comprehension measure with a liberal bias and a moral reasoning measure with a conservative bias would be less than the correlation between a moral comprehension measure and a moral reasoning measure that both had a liberal bias (or that both had a conservative bias). This prediction arises because the Importance
Hypothesis argues the moral reasoning differences between liberals and conservatives are cognitive in nature but politically relative. Hence, regardless of whether the instrument is a moral comprehension or moral reasoning instrument, the hypothesis predicts liberals should appear more advanced on a measure with a liberal bias and conservatives should appear more advanced on a measure with a conservative bias.

This prediction was tested in Study 4 where the relationship between moral comprehension and moral reasoning was examined. The correlation between DIT p scores (the DIT has a liberal dilemma bias) and the liberal subscale of the MCQ did not significantly differ to the correlation between p scores and the conservative subscale of the MCQ (z=1.45, p>0.1). Thus, this prediction was not supported.

Overall, subject to the methodological issues discussed in Section 8.2, with none of its three predictions supported, this thesis did not find any evidence in favour of the Importance Hypothesis.

8.10 Evaluation of the Ipsative Hypothesis

The Ipsative Hypothesis (see Section 3.10) postulates that the relationship between moral reasoning and liberalism-conservatism has been greatly exaggerated because of the ipsativity of moral reasoning instruments such as the DIT and MJI (Emler et al., 1998). Consequently, the only testable prediction that the hypothesis makes is that moral reasoning (or moral reasoning processes) measured non-ipsatively will not be related to liberalism-conservatism.

This prediction was tested in Study 1 where the PIC score was used to non-ipsatively measure where there was a difference in the moral reasoning processing of
liberals and conservatives. PIC scores, as an indicator of some stage 4 reasoning, were significantly related to political scores \( r(133)=0.33; p<0.01 \) indicating that conservatives found such reasoning more important than liberals. This finding mirrors the finding that conservatism is associated with DIT stage 4 scores (e.g., Feather, 1988; Emler et al., 1983, 1998; Rest et al., 1974; Study 1, 4).

Hence, this prediction was not supported and, as this prediction was essentially the sole feature of the Ipsative Hypothesis, subject to the methodological issues discussed in Section 8.2, this thesis did not find any evidence in favour of the Ipsative hypothesis.

8.11 Hypothesis Evaluation Conclusions

Overall, no one hypothesis had all of its predictions completely supported indicating that no one hypothesis can explain the relationship between liberalism-conservatism and Kohlbergian moral reasoning. The two most successful hypotheses were the Sophistication Hypothesis and the Two Paths Hypothesis. Both of these hypotheses had two of their predictions completely supported and the third partially supported.

Actually, there are certain similarities between the hypotheses such as the postulation that the findings that liberals appear to reason more postconventionally than conservatives will be observed regardless of the instrument used to measure moral reasoning. Where the hypotheses differ is essentially whether the effects of moral-cognitive development and liberalism-conservatism on moral reasoning are one and the same (in the case of the Sophistication Hypothesis) or totally independent (in the case of the Two Paths Hypothesis). The results of Study 4 suggest there is an overlap between
these effects but it is far from a complete overlap and thus both hypotheses have some degree of truth.

The next chapter will conclude this thesis by examining the implications of these two hypotheses both appearing to have some validity as well as offering suggestions for future research and possible refinement of models.
Chapter 9

General Implications and Future Research Opportunities

9.1 Introduction

The previous chapter evaluated each of the hypotheses examined in this thesis and concluded, subject to the methodological issues discussed in Section 8.2, that there appeared to be two hypotheses that provide mechanisms of how Kohlbergian moral reasoning is related to liberalism-conservatism - the Two Paths Hypothesis and the Sophistication Hypothesis. This chapter examines which of the two hypotheses appears to provide the stronger mechanism and the general implications of this thesis’ findings before identifying future research opportunities.

9.2 The Relative Strength of Each Hypothesis

Given that two of the proposed hypotheses appear to have some validity, a question arises concerning the relative strength of the mechanisms each provides. From a predictive point of view, the main difference between the Two Paths Hypothesis (see Section 3.7) and the Sophistication Hypothesis (e.g., Fishkin et al., 1973; Thoma, 1993; Thornton et al., 1991; see Section 3.2) is that the former postulates that the effects of cognitive-development on moral reasoning are independent of the effects of liberalism-conservatism whereas the latter postulates that the cognitive-developmental effects are responsible for the effects of liberalism-conservatism (see sections 8.4, 8.7).
Thus, one way of distinguishing these hypotheses is to examine the strength of the relationship between a measure of moral-cognitive development (other than Rest et al.’s (1974) Defining Issues Test$^{54}$) and a measure of liberalism-conservatism. A strong relationship between liberalism-conservatism and moral comprehension argues in favour of the Sophistication Hypothesis (Thornton et al., 1991; see sections 3.2, 8.2) whereas no relationship argues in favour of the Two Paths Hypothesis (see sections 3.7, 8.5).

Study 4 attempted to do this by employing the MCQ (Moral Comprehension Questionnaire) as a measure of moral-cognitive development and the political questionnaire as a measure of liberalism-conservatism. The results obtained (see Chapter 7) indicate a weak relationship ($r(140)=-0.17; p<0.05$). By examining how much variability is accounted for by this correlation and how much is not, the relative strength of each hypothesis can be estimated. If the $R^2$ of this correlation is obtained then we get an estimate of about 3%. An alternate estimate can be based on the change in correlation between political scores and $p$ scores as a result of correcting for MCQ scores. Controlling for MCQ scores reduced this correlation from $r(140)=-0.38$ ($p<0.001$) to $r(140)=-0.35$ ($df=137; p<0.001$). The difference in resultant $R^2$'s indicates about 2% of variability.

Our estimate of the strength of the Two Paths Hypothesis can be obtained by squaring the correlation between moral reasoning and liberalism-conservatism when moral comprehension is controlled for. As reported in Chapter 7, the correlation between political scores and $p$ scores with MCQ scores partialled out was $r(140)=-0.35$ ($df=137$; $p<0.001$).

$^{54}$ Because its cognitive status is part of what is under investigation.
The resultant $R^2$ produces an estimate of about 12%. An alternative estimate could be to consider the correlation when MCQ scores and MCQ x Political interaction scores are accounted for. The resultant correlation is $r(140)=-0.36$ ($df=136; p<0.001$) producing an estimate of 13%.

It should be noted that estimates based on correlations are affected by the reliability of the instruments used (Cronbach, 1960). Fortunately, the same moral reasoning, liberalism-conservatism and moral comprehension measures (DIT p score, political score and MCQ score respectively) were used and thus these reliability effects will be somewhat consistent for all the correlations. Nevertheless, the size of the correlations using the Guildford (1954) reliability correlation can be examined. This attenuation correction raises the correlation between political scores and MCQ scores from $r=-0.17$ to $r=-0.23$, the correlation between political scores and p scores from $r=-0.38$ to $r=-0.53$, the correlation between political scores and p scores controlled for MCQ scores rises from $r=-0.35$ to $r=-0.49$ and the correlation between political scores and p scores controlled for MCQ scores and MCQ x Political interaction scores rises from $r=-0.36$ to $r=-0.50$. Consequently, the estimates for the Sophistication Hypothesis respectively rise to 5% and 4% while the estimates for the Two Paths Model respectively rise to 24% and 25%.

Consequently, regardless of how the estimate is calculated the Two Paths Model appears to provide a model that is markedly stronger than the Sophistication Model. In terms of the relationship between Kohlbergian moral reasoning and liberalism-conservatism, we can then say that although liberals appear to be more moral-cognitively advanced than conservatives, the main reason that they score higher on Kohlbergian
moral reasoning instruments such as the DIT and MJI is because of political factors that are not cognitive-developmental in nature.

9.3 Implications for the DIT

As discussed in Section 3.2, the Sophistication Hypothesis corresponds to the traditional Kohlbergian hypothesis of moral reasoning and hence its support does not provide any important new implications for Kohlbergian measures (such as the DIT). However, the finding that the Two Paths Hypothesis is a relatively strong mechanism provides several important implications for the DIT and indeed any Kohlbergian instrument based on the principle of stage preference (such as the MJI).

9.3.1 The Liberal Bias Claim Revisited

Given that the Two Paths Hypothesis postulates that part of the reason liberals score highly on the DIT is not cognitive-developmental but political, the objection that the DIT is a politically biased instrument needs to be resurrected, albeit in a different form to Emler and his colleagues (e.g., Emler, 1983; Emler et al., 1983, 1998; Emler & Stace, 1999). While Emler’s argument concerning the political nature of the moral reasoning employed in the DIT was not supported in this thesis (see Section 8.3), what was supported is the notion that stage 5 concepts, such as rights, do seem to be ideas attractive to liberals. Compared to conservatives, liberals appear to endorse postconventional reasoning significantly more than their increased understanding of them suggests they should \( r(140)=-0.35, df=137, p<0.001 \).
This has the important consequence that care must be taken when the moral development of individuals and groups is compared utilising the DIT. The comparison may be flawed if the individuals/groups being compared are politically different. If one group is more liberal than another then their p score will be increased by their position on the political path and thus that group may unjustifiably appear to be more morally developed. One possible way of handling this issue is to test each group with a liberalism-conservatism questionnaire so that p scores can be corrected if the groups are different. Note that if the individuals/groups do not differ in terms of liberalism-conservatism then the groups will not differ in terms of the political path and, consequently, using the DIT to compare the moral development of these groups will not be problematic because higher or lower scores will respectively denote greater or lesser moral development (because of the absence of any political path differences). Briefly, the DIT can be used to compare moral development at any point in the liberalism-conservatism spectrum but not across that spectrum.

Beyond this issue of comparison, the apparent validity of the Two Paths Hypothesis does not greatly impact the validity of the DIT. Firstly, the Two Paths Hypothesis does not just state that p scores are predominantly politically determined. It states that two major factors are responsible for an individual’s p score – the political factor and the cognitive-developmental one. The cognitive-developmental factor is the same factor that Kohlberg (e.g., 1969, 1984; Colby et al., 1987) and neo-Kohlbergians (e.g., Rest et al., 1999a; Thoma et al., 1999) argue underlies moral reasoning. The multiple regression results from Study 4, where MCQ scores and political scores
independently predicted moral reasoning \((\beta=0.232; \ p<0.01 \ \text{and} \ \beta=-0.346; \ p<0.001\) respectively) provide evidence for this contention.

Secondly, the lack of a significant interaction effect in the multiple regression analysis in Study 4 (see Chapter 7) suggests that the relationship between moral comprehension and moral reasoning does not differ between liberals and conservatives. Hence, if one takes a given individual, their p score will be just as good an estimate of their performance on other moral-cognitive measure such as the MCQ (and arguably therefore just as good an estimate of their moral-cognitive development) regardless of whether they are a liberal or a conservative. Indeed, because (according to the Two Paths Hypothesis) conservatives only have access to the cognitive-developmental path, it can be argued that the DIT is better at determining moral development amongst a group of conservatives as opposed to a group of liberals (whose p scores may be inflated by their political leaning).

Thirdly, according to the Two Paths Hypothesis, the sense in which the DIT is misrepresenting the moral reasoning used by (at least some) liberals is limited. Liberals do attempt to utilise more postconventional concepts in their moral reasoning more than conservatives. The Two Paths Hypothesis postulates, however, that at least some liberals fail to understand this reasoning to the same extent as conservatives who employ comparable amounts of postconventional reasoning. Thus, according to Two Paths Hypothesis, the DIT misrepresents the moral reasoning of (at least some) liberals only to the extent that those liberals fail to understand their own reasoning – they think that are using postconventional concepts but in actuality they are misguided. The Study 4 finding that the correlation between MCQ scores and political scores failed to account for the
correlation between DIT scores and political scores \((r(140)=-0.35; \text{df}=137; p<0.001\) with MCQ scores controlled for) provides some evidence of this.

Finally, it must be remembered that the p score is not the only DIT measure. While p scores have been the measure where much recent research on the moral reasoning differences between liberals and conservatives has occurred (which is why this thesis has focussed on them; see Section 2.3), following Lind’s (e.g., 1995, Lind et al., 1985; see also Rest et al., 1997a, Section 1.8) work on stage-consistency, Rest et al. (1997b) introduced a new DIT index. This n2 index was designed to incorporate both the p score concept of postconventional reasoning endorsement and Lind’s concept of stage consistency (Rest et al., 1997b). Although the results were not reported in Chapter 7\(^{55}\), Study 4 observed that the positive correlation between n2 scores and MCQ scores was significantly stronger than the corresponding correlation between MCQ scores and p scores \((z=2.50, p<0.05)\). Additionally, the negative correlation between n2 scores and political scores was significantly weaker than the corresponding correlation between p scores and political scores \((z=2.90, p<0.01)\). This suggests that the n2 score seems to be more strongly related to moral comprehension and less strongly related to liberalism-conservative than the p score and consequently is more strongly influenced by the cognitive-developmental path than the political path. More research is needed on this topic. A good starting point would be the re-examination of the results of previous research investigating the relationship between Kohlbergian moral reasoning and

\(^{55}\) Because they were not relevant to the hypotheses being tested in Study 4.
liberalism-conservatism (e.g., the faking paradigm studies discussed in sections 2.4-2.8) but employing n2 scores instead of p scores as the dependent variable.

9.3.2 Appraisal of the Construct Validity Arguments Against the DIT

Regardless of whether the p or n2 score is the measure of choice, this thesis has also failed to find evidence in favour of the two arguments against DIT construct validity that were first raised in Section 1.6. It must, of course, be noted the methodological limitations discussed in Section 8.2 also apply here but subject to these limitations, neither validity argument seems supported.

The first of these arguments is that p scores merely represent verbal ability (Lykken, 1991; Sanders et al., 1995). In Study 3, MCQ scores were associated with p scores when verbal comprehension was controlled for and associated with verbal comprehension when p scores were controlled for ($r(115)=0.40; df=112; p<0.001$). Thus, verbal comprehension cannot even explain the relationship between moral comprehension and moral reasoning let alone the finding from Study 4 that moral reasoning was related to liberalism-conservatism independently of its relationship to moral comprehension. Lykken (1991) and Sanders et al. (1995) mistakenly cast verbal comprehension as the key cognitive-developmental measure underlying moral reasoning (when moral comprehension seems more important) and fail to account for the existence of the political path.

The other validity argument (first briefly raised in Section 1.6) is a consequence of the Social Communication Hypothesis (e.g., Emler et al., 1983, 1998; see Section 3.4). This argument is the claim that scores on the DIT merely represent political ideology –
stage 5 represents liberalism and stage 4 represents conservatism. While this thesis appears to provide evidence that stage 5 is, from a cognitive-development perspective, prematurely attractive to liberals, Study 4 found that moral comprehension and liberalism-conservatism independently predict p scores ($\beta=0.232, p<0.01$ and $\beta=-0.346, p<0.001$ respectively). Consequently, there is a cognitive variable underlying endorsement of p scores for both liberals and conservatives, which is not consistent with this argument against DIT construct validity.

In conclusion, neither of these challenges to the DIT’s construct validity appears valid.

9.4 Areas for Future Research

As well as providing implications for the DIT, the findings of this thesis open up several areas of research. The areas presented below are not meant to be a comprehensive description of possible research arising from this thesis but merely examples of three possible research avenues.

9.4.1 Further Testing of Hypotheses

While this thesis has provided several tests of the hypotheses under review (see Chapter 8 for a summary), it is of course by no means exhaustive. Three refinements and/or extensions of this thesis’ testing are discussed below.

One important refinement of this thesis’ research concerns the DIT-CON. In Study 2 (see Chapter 5), the test was found to have a low reliability and, while the Guildford (1954) corrections suggested that the results found were genuine, another test
with a revised DIT-CON consisting of more psychometrically reliable items would be useful. As well as allowing the re-testing of several hypothesis predictions, this would allow further examination of the Two Paths Hypothesis. In particular, whether or not the Two Paths are equally strong on the DIT-CON and the DIT could be investigated. This could reveal what type of factors may or may not manipulate the relative strength of each path. Given the DIT-CON was not as reliable as desired, it is suggested that a “DIT-CON-R” be created from interviews (in an analogous manner to the DIT) rather than by importing DIT moral reasoning (see the Discussion section of Chapter 5 for details).

One additional way of testing (some) predictions made by the Social Communication Hypothesis, Sophistication Hypothesis and Two Paths Hypothesis is via the use of longitudinal studies. In particular, a longitudinal study examining changes in moral comprehension, liberalism-conservatism and moral reasoning could potentially be very informative as it would allow changes in an individual’s moral reasoning to be linked to changes in their moral comprehension and/or liberalism-conservatism. There are several different possible longitudinal studies that could be informative. For instance, one study could examine the moral-reasoning development of a group of liberals and a group of conservatives. Another study, could examine the changes in moral reasoning as individuals develop a political identity and as this identity changes. Considering that political identity formation is usually considered to be a process of adolescence (e.g., Yates & Youniss, 1998) these studies could perhaps begin in early adolescence and continue into adulthood. This would be an extension of this thesis’ research that has been focussed on differences across individuals as opposed to changes within individuals.
Finally, the faking paradigm (e.g., Emler et al., 1983; Barnett et al., 1995; see Chapter 2) can provide a useful test of the Two Paths Hypothesis. The Two Paths Hypothesis interprets the faking paradigm as affecting individuals’ moral reasoning via the political path resulting in them endorsing reasoning different to that which they ordinarily would. Consequently, according to the Two Paths Hypothesis, a faking study should not affect the cognitive-developmental path. Thus, a possible test of the Two Paths Hypothesis is to replicate Emler et al.’s (1983) faking study but using the MCQ instead of the DIT. The Two Paths Hypothesis predicts that faking as either a liberal or a conservative should not increase MCQ scores.

9.4.2 The Independence of Hypotheses

Assuming that such further testing supports the conclusions that this thesis makes (in terms of which hypotheses accurately explain the relationship between liberalism-conservatism and Kohlbergian moral reasoning), there still is an important issue about the hypotheses that needs to be addressed. While the Two Path Hypothesis and Sophistication Hypothesis have been considered independent for the purposes of testing (and may indeed be totally independent), it is conceivable that the apparent effects of the Sophistication Hypothesis arise from the mechanism provided by the Two Paths Hypothesis. This, albeit speculative, possibility is that “pseudo-postconventional liberals” posited by the Two Paths Hypothesis (i.e., liberals who attempt to make postconventional arguments without the appropriate cognitive development) discuss their attempted postconventional arguments and, as a result, at some point develop the
understanding that allows them to “properly” reason postconventionally hence, resulting in the cognitive difference attributed to the Sophistication Hypothesis.

Evidence suggesting the possibility of this is found in Shlaefli et al.’s (1985) meta-analysis of moral intervention studies, which found that exposure to Kohlberg’s (e.g., 1969, 1984; Colby et al., 1987) theory appeared to increase p scores. Two potential reasons why this would happen are (a) simple exposure to postconventional ideas increases p scores and (b) exposure to postconventional ideas with the associated belief that they are superior (by virtue of being more advanced in Kohlberg’s hierarchy) increases p scores. Clearly, pseudo-postconventional liberals would be covered by (a) because they are actually trying to employ these postconventional ideals. They would also be covered by case (b) because they find such ideals attractive from a political perspective and, consequently, superior to non-postconventional reasoning which they perceive as conservative (e.g., Reicher & Emler, 1984; Emler et al., 1998; Emler & Stace, 1999).

One potential way to test whether such a mechanism exists is to perform an intervention study involving two groups. The population from which these groups are drawn does not matter so as long as they are drawn from the same population (and produce sufficient variance on the DIT). However, one group would be given moral dilemmas and told to discuss them with no guidelines as to what to discuss. The other group would be given the same moral dilemmas and told to discuss them only in terms of postconventional ideas. If the political path of the Two Paths Hypothesis is actually providing the mechanism that results in moral comprehension being related to liberalism-conservatism, then the postconventional reasoning group should exhibit a greater increase
in p scores than the group that is non-directed in their discussion. This is because such a finding would demonstrate that discussion of postconventional ideals does indeed increase p scores more than general moral dilemma discussion.

9.4.3 Investigation of the Political Path

Regardless of whether or not the political path is actually responsible for the cognitive effect attributed to the Sophistication Hypothesis, the results of this thesis (especially the multivariate regression in Study 4) suggest that it definitely is a component in determining an individual’s moral reasoning. Whilst the developmental path has been studied since at least as early as Piaget (1932/1968), the political path has not been studied in great depth. What is it about liberals that makes them more receptive to postconventional reasoning at a lower level of moral comprehension than conservatives? Alternatively, what is it about conservatives that make them less receptive?

Jost et al.’s (2003) meta-analysis provides several possibilities that are worthy of investigation. One possibility is dogmatism, which Wahrman (1981) found was correlated with DIT scores and explained a correlation between religious affiliation and moral reasoning. Perhaps the increased dogmatism that conservatives display (Jost et al. 2003) means that they are very cautious when it comes to adopting “new” moral reasoning – they have to fully understand it (and accept it) before they use it. Other possibilities (admittedly there is some overlap in the concepts) arising from Jost et al.’s (2003) results include the lesser integrative complexity and uncertainty tolerance
exhibited by conservatives. Regardless of what the underlying variables are, the political factors influencing moral reasoning require investigation.

9.5 Conclusion

This chapter has examined some implications of this thesis’ findings. Among these are that the Two Paths Hypothesis appears to provide a stronger mechanism for explaining the relationship between Kohlbergian moral reasoning and liberalism-conservatism than the Sophistication Hypothesis. Additionally, while this thesis’ results appear to refute the construct validity arguments against the DIT, they also indicate that the p scores of liberals are inflated and consequently care needs to be taken to avoid political bias when using the DIT to compare the moral development of individuals or groups.

Among the research possibilities arising from this thesis are further testing of the competing hypotheses, examination of the degree of interaction amongst the hypotheses and determining why liberals, compared to conservatives, appear to be more receptive to postconventional reasoning irrespective of cognitive-development. Several potential experiments on these topics were discussed.

Overall, this thesis has delineated a perhaps more complex position on why liberals score higher than conservatives on Kohlbergian moral reasoning instruments than those held before it. Prior to this thesis, most research seemed to be focussed on DIT (and other Kohlbergian moral reasoning instruments) as either measures of moral-cognitive development, where political correlations were interpreted as liberals being more morally developed than conservatives (i.e., the Sophistication Hypothesis; e.g.,
Fishkin et al., 1973; Thoma, 1993; Thornton et al., 1991; see Section 3.2), or simply as a placeholder for political ideology (i.e., the Social Communication Hypothesis; e.g., Emler et al., 1983, 1998; see Section 3.4).

This thesis has permitted a more detailed understanding of the relationship between Kohlbergian moral reasoning and liberalism-conservatism to be formed by attempting to overcome several methodological hurdles. Issues of ipsativity in moral reasoning research, the dilemma bias in moral reasoning instruments and the absence of a moral comprehension scale were all tackled in studies 1, 2 and 4 respectively and (with the possible exception of the dilemma bias issue) in a somewhat successful fashion. Consequently, this has (to some extent) been able to unweave the interplay of cognitive and political factors in moral reasoning.

Once unwoven, what appeared to be revealed was the case where, although the utilisation of postconventional reasoning is indeed cognitive-developmental in nature, at least some liberals will prematurely indicate preference for such reasoning. These pseudo-postconventional liberals appear to use postconventional reasoning but lack the pre-requisite cognitive development suggesting they fail to accurately use such reasoning. Maybe as a consequence of this (see Section 9.4.2), maybe independently of it, liberals do seem be more moral-cognitively developed than conservatives although this greater liberal moral development plays second fiddle as a mechanism underlying the relationship between Kohlbergian moral reasoning and liberalism-conservatism. This

56 Study 3 was needed to allow this issue to be tackled in Study 4.
much is descriptive - the normative implications of these findings are best left to the philosophers and sociologists.

In the final analysis, what this thesis has confirmed is perhaps the point that what a person thinks is right and the way they would run things are related but not as clearly as one might imagine.
References


Appendix A

Study 1 Methodological Details

A.1 Purging of Participants

As discussed in the Method section of Chapter 4, 13 participants were purged from the Study 1 sample due to failing the DIT reliability checks recommended by Rest et al. (1999c).

Rest et al. (1999c) recommend that a respondent’s data be discarded if their DIT Rate-Rank Inconsistency (RtXRk) score is greater than 200, if they produce a DIT M score of greater than 10, if they omit more than three ratings on any two stories, if they omit more than 6 rankings or if they are non-discriminating on more than one dilemma. A non-discriminating respondent is one in who rates 11 or more of the 12 items on each DIT dilemma equally or who ranks the same item in all four places (Rest et al., 1999c).

Eight participants from Study 1 were purged on the basis of their RtXRk scores – these were 205, 205, 219, 226, 229, 233, 251 and 288 respectively. One participant was purged because he/she produced a M score of 11. The remaining three participants from Study 1 were purged because they violated multiple conditions. One respondent had a RtXRk score of 654, 20 missing ranks and was non-discriminating on 3 dilemmas. Another respondent has a RtXRk score of 270 and was non-discriminating on all 6 dilemmas. The third respondent had a RtXRk score of 509, 18 missing ranks and was non-discriminating on 4 dilemmas.
A.2 Political Questionnaire

This questionnaire was employed in Study 1 to measure liberalism-conservatism. Items 2, 19, 29, 35, 36 and 37 did not significantly load on the 42 item total score ($ps<0.05$). Consequently, the liberalism-conservatism score was calculated across the other 36 other items. The other, non-numbered items in this questionnaire, apart from gender and age, were employed to validate the questionnaire in Study 1 (see Chapter 4). Respondents’ self-rated liberalism-conservatism score was their response to the last questionnaire.
For the following items, indicate to what extent you believe in or favour them. Use the following scale: 1=strongly oppose; 2=oppose; 3=neither support nor oppose; 4=support; 5=strongly support.

1) Death penalty ___
2) State Housing ___
3) Stiffer gaol terms ___
4) Environmental protection ___
5) Censorship of the internet ___
6) Voluntary euthanasia ___
7) Protecting existing institutions (e.g., style of government) ___
8) Unions ___
9) Religious authority ___
10) Gay rights ___
11) Pre-marital virginity ___
12) Government Welfare ___
13) Work For the Dole ___
14) Increased immigration ___
15) Economic Rationalism ___
16) Legalised abortion ___
17) War-time Conscription ___
18) Condom vending machines ___
19) Small Government ___
20) Legalised prostitution ___
21) Less tax and less government spending ___
22) Unemployment Benefits ___
23) A large military ___
24) Socialism ___
25) Truth of at least one religious text (e.g., Bible, Koran) ___
26) Strikes ___
27) Bible Truth ___
28) Multiculturalism ___
29) Church Authority ___
30) Picketing ___
31) Banning X-rated videos ___
32) Asian immigration ___
33) War on drugs ___
34) Constant policy revision ___
35) Non-revealing attire ___
36) A popularly elected president ___
37) Right to own firearms ___
38) Native title ___
39) Australia as a monarchy ___
40) Decriminalised marijuana ___
41) Mandatory sentencing ___
42) Availability of fertility treatment for lesbians ___
Please circle your gender?

Male   Female

Please give your age in years at your last birthday___

Which one of the following parties are you most likely to vote for at the next election? Please circle one.
(a)  Labor
(b)  Green
(c)  National
(d)  One Nation
(e)  Liberal
(f)  Democrat

For the following political parties, circle “yes” if you would consider voting for them. Otherwise circle “no”.

(a) Democrat   Yes   No
(b) National   Yes   No
(c) Liberal    Yes   No
(d) Labor      Yes   No
(e) One Nation Yes   No
(f) Green      Yes   No
For the following questions, be aware of the following distinction.

Left wing, sometimes called liberalism (not to be confused with the Liberal Party of Australia), refers to a collection of political principles such as collective ownership of property, business and industry, higher taxes, increased welfare and an open approach to things such as morality and culture. A very extreme example of this are the communists who ruled the U.S.S.R. and Eastern Europe just after World War II.

Right wing, sometimes called conservatism, refers to a collection of political beliefs such as traditional opinions on things such as morality and culture, low taxes, lower welfare and private ownership of property, industry and business. A very extreme example of this were the fascist movements in Japan, Italy and Germany around the time of World War II.

Rank (i.e., order) the following political views of the following parties from 1 (most left wing) to 6 (most right wing).

(a) Liberal  
(b) National  
(c) One Nation  
(d) Labor  
(e) Green  
(f) Democrat  

On a scale of 0 (very left wing) to 10 (very right wing), how would classify your political opinions? __
A.3 Defining Issues Test

The Defining Issues Test (DIT; Rest et al., 1974) was employed in Study 1 to measure moral reasoning preference. The instrument was scored by the Center for the Study of Ethical Development. In order to present the test here, a paper version of the test has been scanned – the tests were provided to us in hard copy only. Note that the last page (i.e., the page with dilemmas 7 and 8) was not actually in any of the studies in this thesis because it is not actually part of the DIT per se but allows a researcher to extend it.
Opinions about Social Problems

The purpose of this questionnaire is to help us understand how people think about social problems. Different people have different opinions about questions of right and wrong. There are no "right" answers to such problems and the way that math problems have right answers. We would like you to tell us what you think about several problem stories.

You will be asked to read a story from this booklet. Then you will be asked to mark your answers on a separate answer sheet. More details about how to do this will follow. But it is important that you fill in your answers on the answer sheet with a #2 pencil. Please make sure that your mark completely fills the little circle, that the mark is dark, and that any erasures that you make are completely clean.

The Identification Number at the top of the answer sheet may already be filled in when you receive your materials. If not, you will receive special instructions about how to fill in that number.

In this questionnaire you will be asked to read a story and then to place marks on the answer sheet. In order to illustrate how we would like you to do this, consider the following story:

FRANK AND THE CAR

Frank Jones has been thinking about buying a car. He is married, has two small children and earns an average income. The car he buys will be his family's only car. It will be used mostly to get to work and drive around town, but sometimes for vacation trips also. In trying to decide what car to buy, Frank Jones realized that there were a lot of questions to consider. For instance, should he buy a larger used car or a smaller new car for about the same amount of money? Other questions occur to him.

We note that this is not really a social problem, but it will illustrate our instructions. After you read the story you will then turn to the answer sheet to find the section that corresponds to the story. But in this sample story, we present the questions below (along with some sample answers). Note that all your answers will be marked on the separate answer sheet.
First, on the answer sheet for each story you will be asked to indicate your recommendation for what a person should do. If you tend to favor one action or another (even if you are not completely sure), indicate which one. If you do not favor either action, mark the circle by "can't decide."

Second, read each of the items numbered 1 to 12. Think of the issue that the item is raising. If that issue is important in making a decision, one way or the other, then mark the circle by "great." If that issue is not important or doesn't make sense to you, mark "no." If the issue is relevant but not critical, mark "such," "some," or "little" --depending on how much importance that issue has in your opinion. You may mark several items as "great" or any other level of importance -- there is no fixed number of items that must be marked at any one level.

Third, after you have made your marks along the left hand side of each of the 12 items, then at the bottom you will be asked to choose the item that is the most important consideration out of all the items printed there. Pick from among the items provided even if you think that none of the items are of "great" importance. Of the items that are presented there, pick one as the most important (relative to the others), then the second most important, third, and fourth most important.

**SAMPLE ITEMS and SAMPLE ANSWERS:**

**FRANK AND THE CAR:**  
- buy new car  
- can't decide  
- buy used car

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<th>Great</th>
<th>Some</th>
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1. Whether the car dealer was in the same block as where Frank lives.
2. Would a used car be more economical in the long run than a new car.
3. Whether the color was green, Frank's favorite color.
4. Whether the cubic inch displacement was at least 200.
5. Would a large, roomy car be better than a compact car.
6. Whether the front suspensions were differential.

Most important item: 0 0 0 0 0 0 0 0 0 0 0 0
Second most important: 0 0 0 0 0 0 0 0 0 0 0 0
Third most important: 0 0 0 0 0 0 0 0 0 0 0 0
Fourth most important: 0 0 0 0 0 0 0 0 0 0 0 0

Note that in our sample responses, the first item was considered irrelevant; the second item was considered as a critical issue in making a decision; the third item was considered of only moderate importance; the fourth item was not clear to the person responding whether 200 was good or not, so it was marked "no"; the fifth item was also of critical importance; and the sixth item didn't make any sense, so it was marked "no".

Note that the most important item comes from one of the items marked on the far left hand side. In deciding between item #2 and #5, a person should re-read these items, then put one of them as the most important; and the other item as second, etc.
Here is the first story for your consideration. Read the story and then turn to the separate answer sheet to mark your responses. After filling in the four most important items for the story, return to this booklet to read the next story. Please remember to fill in the circle completely, make dark marks, and completely erase all corrections.

HEINZ AND THE DRUG

In Europe a woman was near death from a special kind of cancer. There was one drug that doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist was charging ten times what the drug cost to make. He paid $200 for the radium and charged $2,000 for a small dose of the drug. The sick woman's husband, Heinz, went to everyone he knew to borrow the money, but he could only get together about $1,000, which is half of what it cost. He told the druggist that his wife was dying, and asked him to sell it cheaper or let him pay later. But the druggist said, "No, I discovered the drug and I'm going to make money from it." So Heinz got desperate and began to think about breaking into the man's store to steal the drug for his wife. Should Heinz steal the drug?

ESCAPED PRISONER

A man had been sentenced to prison for 10 years. After one year, however, he escaped from prison, moved to a new area of the country, and took on the name of Thompson. For eight years he worked hard, and gradually he saved enough money to buy his own business. He was fair to his customers, gave high wages, and gave most of his own profit to charity. Then one day, Mrs. Jones, an old neighbor, recognized him as the man who had escaped from prison eight years before, and whom the police had been looking for. Should Mrs. Jones report Mr. Thompson to the police and have him sent back to prison?

NEWSPAPER

Fred, a senior in high school, wanted to publish a mimeographed newspaper for students so that he could express many of his opinions. He wanted to speak out against the use of the military in international disputes and to speak out against some of the school's rules, like the rule forbidding boys to wear long hair.

When Fred started his newspaper, he asked his principal for permission. The principal said it would be all right if before every publication Fred would turn in all his articles for the principal's approval. Fred agreed and turned in several articles for approval. The principal approved all of them and Fred published two issues of the paper in the next two weeks.

But the principal had not expected that Fred's newspaper would receive so much attention. Students were so excited by the paper that they began to organize protests against the hair regulation and other school rules. Angry parents objected to Fred's opinions. They phoned the principal, telling him that the newspaper was unpatriotic and should not be published. As a result of the rising excitement, the principal ordered Fred to stop publishing. He gave as a reason that Fred's activities were disruptive to the operation of the school. Should the principal stop the newspaper?
DOCTOR'S DILEMMA

A lady was dying of cancer which could not be cured and she had only
about six months to live. She was in terrible pain, but she was so weak
that a good dose of pain-killer like morphine would make her die sooner.
She was delirious and almost crazy with pain, and in her calm periods, she
would ask the doctor to give her enough morphine to kill her. She said
she couldn't stand the pain and that she was going to die in a few months
anyway. Should the doctor give her an overdose of morphine that would
make her die?

WEBSTER

Mr. Webster was the owner and manager of a gas station. He wanted to
hire another mechanic to help him, but good mechanics were hard to find.
The only person he found who seemed to be a good mechanic was Mr. Lee, but
he was Chinese. While Mr. Webster himself didn't have anything against
Orientals, he was afraid to hire Mr. Lee because many of his customers
didn't like Orientals. His customers might take their business elsewhere if
Mr. Lee was working in the gas station.

When Mr. Lee asked Mr. Webster if he could have the job, Mr. Webster
said that he had already hired somebody else. But Mr. Webster really had
not hired anybody, because he could not find anybody who was a good mechanic
besides Mr. Lee. Should Mr. Webster have hired Mr. Lee?

STUDENT TAKE-OVER

Back in the 1960s at Harvard University there was a student group
called Students for a Democratic Society (SDS). SDS students were against
the war in Viet Nam, and were against the army training program (ROTC) that
helped to send men to fight in Viet Nam. While the war was still going on,
the SDS students demanded that Harvard end the army ROTC program as a
university course. This would mean that Harvard students could not get army
training as part of their regular course work and not get credit for it
towards their degree.

Harvard professors agreed with the SDS students. The professors voted
to end the ROTC program as a university course. But the President of the
University took a different view. He stated that the army program should
stay on campus as a course.

The SDS students felt that the President of the University was not
going to pay attention to the vote of the professors, and was going to keep
the ROTC program as a course on campus. The SDS students then marched to
the university's administration building and told everyone else to get out.
They said they were taking over the building to force Harvard's President to
get rid of the army ROTC program on campus for credit as a course.
Were the students right to take over the administration building?

Please make sure that all your marks are dark, fill the circles, and that
all erasures are clean.

THANK YOU.
### HEINZ AND THE DRUG

- 1. Whether a community's laws are going to be upheld.
- 2. Isn't it only natural for a loving husband to care so much for his wife that he'd steal?
- 3. Is Heinz willing to risk getting shot as a burglar or going to jail for the chance that stealing the drug might help?
- 4. Whether Heinz is a professional wrestler, or has considerable influence with professional wrestlers.
- 5. Whether Heinz is stealing for himself or doing this solely to help someone else.
- 6. Whether the druggist's rights to his invention have to be respected.
- 7. Whether the essence of living is more encompassing than the termination of dying, socially and individually.
- 8. What values are going to be the basis for governing how people act towards each other.
- 9. Whether the druggist is going to be allowed to hide behind a worthless law which only protects the rich anyhow.
- 10. Whether the law in this case is getting in the way of the most basic claim of any member of society.
- 11. Whether the druggist deserves to be robbed for being so greedy and cruel.
- 12. Would stealing in such a case bring about more total good for the whole society or not.

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### ESCAPED PRISONER

- 1. Hasn't Mr. Thompson been good enough for such a long time to prove he isn't a bad person?
- 2. Would you be better off without prisons and the oppression of our legal system?
- 3. Has Mr. Thompson really paid his debt to society?
- 4. Would society be failing what Mr. Thompson should fairly expect?
- 5. What would be the right thing to do in this situation?
- 6. How would you feel about the situation and what Mr. Thompson should fairly expect?
- 7. How would you feel about the situation and what Mr. Thompson should fairly expect?
- 8. If Mr. Thompson was let off?
- 9. Was Mrs. Jones a good friend of Mr. Thompson?
- 10. Wouldn't it be a citizen's duty to report an escaped criminal, regardless of the circumstances?
- 11. How would the will of the people and the public good be served?
- 12. Would going to prison do any good for Mr. Thompson or protect anybody?

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<td>WEBSTER</td>
<td>Should have hired Mr. Lee</td>
<td>Can't decide</td>
<td>Should not have hired him</td>
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<td>1. Does the owner of a business have the right to make his own business decisions or not?</td>
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<td>2. Whether there is a law that forbids racial discrimination in hiring for jobs.</td>
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<td>3. Whether Mr. Webster is prejudiced against orientals himself or whether he means nothing personal in refusing the job.</td>
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<td>4. Whether hiring a good mechanic or paying attention to his customers' wishes would be best for his business.</td>
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<td>5. What individual differences ought to be relevant in deciding how society's rules are filled?</td>
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<td>6. Whether the greedy and competitive capitalistic system ought to be completely abandoned.</td>
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<td>7. Do a majority of people in Mr. Webster's society feel like his customers or are a majority against prejudices?</td>
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<td>8. Whether hiring capable men like Mr. Lee would use talents that would otherwise be lost to society.</td>
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<td>9. Would refusing the job to Mr. Lee be consistent with Mr. Webster's own moral beliefs?</td>
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<td>10. Could Mr. Webster be so hard-hearted as to refuse the job, knowing how much it means to Mr. Lee?</td>
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<td>11. Whether the Christian commandment to love your fellow man applies to this case.</td>
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<td>12. If someone's in need, shouldn't he be helped regardless of what you get back from him?</td>
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**Fourth most Important**
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<thead>
<tr>
<th>STUDENTS</th>
<th>Take it over</th>
<th>Can't decide</th>
<th>Not take it over</th>
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<tbody>
<tr>
<td>1. Are the students doing this to really help other people or are they doing it just for kicks.</td>
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<td>2. Do the students have any right to take over property that doesn't belong to them.</td>
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<td>3. Do the students realize that they might be arrested and fined, and even expelled from school.</td>
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<td>4. Would taking over the building in the long run benefit more people to a greater extent.</td>
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<td>5. Whether the president stayed within the limits of his authority in ignoring the faculty vote.</td>
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<td>6. Will the takeover anger the public and give all students a bad name.</td>
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<td>7. Is taking over a building consistent with principles of justice.</td>
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<td>8. Would allowing one student take-over encourage many other student take-overs.</td>
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<td>9. Did the president bring this misunderstanding on himself by being so unreasonable and uncooperative.</td>
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<td>10. Whether running the university ought to be in the hands of a few administrators or in the hands of all the people.</td>
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<td>11. Are the students following principles which they believe are above the law.</td>
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<td>12. Whether or not university decisions ought to be respected by students.</td>
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**Most Important Item**
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**PLEASE DO NOT WRITE IN THIS AREA**
A.4 PIC Questionnaire

This questionnaire was employed in Study 1 to calculate PIC scores. Note that the questions relate to the DIT dilemmas with the same names. To facilitate counterbalancing, these were given to respondents in printed form separately to the DIT (although they were also present on the DIT).
Heinz and the drug

1) On a scale of 0 (believe it is very bad) to 10 (believe it is very good), how would the lawmakers, i.e., the members of parliament that pass laws, feel towards Heinz stealing the drug when they draft laws on such issues? __

2) On a scale of 0 (strongly direct them to steal) to 10 (strongly direct them not to steal), how would someone who wanted to raise their children to be very moral individuals, tell their child how to deal with situations comparable to Heinz’s? __

3) On a scale of 0 (no punishment) to 10 (severe punishment), if Heinz stole the drug, was taken to court and found guilty, how severe a punishment would he be likely to receive? __

4) On a scale of 0 (strongly punish) to 10 (strongly reward), how should society deal with individuals who perform actions comparable to Heinz stealing the drug? __

5) If Heinz stole the drug, how right or wrong would this be on a scale from -5 (a very evil act) through 0 (neither good nor evil) to 5 (a very good act)? ___

6) If Heinz stole the drug, how severe a violation of the law would this be on a scale from 0 (a trivial infraction) to 10 (a severe transgression)? ___

7) On a scale of 0 (very likely) to 10 (very unlikely), if Heinz stole the drug, how likely would it be that the Director of Public Prosecutions would prosecute Heinz to the full extent of the law? __

8) If you were a philosopher writing a treatise on how humans should ideally act and were examining Heinz’s situation, on a scale of -5 (very ideal behaviour) through 0 (idealistically neutral behaviour) to 5 (very non-ideal behaviour), what type of behaviour would Heinz’s theft of the drug be an example of? __
Escaped prisoner

1) On a scale of 0 (believe it is very bad) to 10 (believe it is very good), how would the lawmakers, i.e., the members of parliament that pass laws, feel towards Mrs Jones NOT reporting Mr Thompson when they draft laws on such issues? __

2) On a scale of 0 (strongly direct them not to report) to 10 (strongly direct them to report), how would someone who wanted to raise their children to be very moral individuals, tell their child how to deal with situations comparable to Mrs Jones’? __

3) On a scale of 0 (no punishment) to 10 (severe punishment), if Mrs Jones failed to report Mr Thompson, was taken to court and found guilty, how severe a punishment would she be likely to receive? __

4) On a scale of 0 (strongly punish) to 10 (strongly reward), how should society deal with individuals who perform actions comparable to Mrs Jones NOT reporting Mr Thompson? __

5) If Mrs Jones did NOT report Mr Thompson, how right or wrong would this be on a scale from -5 (a very evil act) through 0 (neither good nor evil) to 5 (a very good act)? __

6) If Mrs Jones did not report Mr Thompson, how severe a violation of the law would this be on a scale from 0 (a trivial infraction) to 10 (a severe transgression)? __

7) On a scale of 0 (very likely) to 10 (very unlikely), if Mrs Jones failed to report Mr Thompson, how likely would it be that the Director of Public Prosecutions would prosecute her to the full extent of the law? __

8) If you were a philosopher writing a treatise on how humans should ideally act and were examining Mrs Jones’s situation, on a scale of -5 (very ideal behaviour) through 0 (idealistically neutral behaviour) to 5 (very non-ideal behaviour), what type of behaviour would Mrs Jones’ failure to report Mr Thompson be an example of? __
Newspaper

1) On a scale of 0 (believe it is very bad) to 10 (believe it is very good), how would the lawmakers, i.e., the members of parliament that pass laws, feel towards the principal shutting the newspaper down when they draft laws on such issues? __

2) On a scale of 0 (strongly direct them to close the newspaper) to 10 (strongly direct them not to close the newspaper), how would someone who wanted to raise their children to be very moral individuals, tell their child how to deal with situations comparable to the principal’s? __

3) On a scale of 0 (no punishment) to 10 (severe punishment), if the principal shut the newspaper down, was taken to court and found guilty, how severe a punishment would she be likely to receive? __

4) On a scale of 0 (strongly punish) to 10 (strongly reward), how should society deal with individuals who perform actions comparable to the principal shutting the newspaper down? __

5) If the principal shut down the newspaper, how right or wrong would this be on a scale from -5 (a very evil act) through 0 (neither good nor evil) to 5 (a very good act)? __

6) If the principal shut down the newspaper, how severe a violation of the law would this be on a scale from 0 (a trivial infraction) to 10 (a severe transgression)? __

7) On a scale of 0 (very likely) to 10 (very unlikely), if the principal shut down the newspaper, how likely would it be that the Director of Public Prosecutions would prosecute him/her to the full extent of the law? __

8) If you were a philosopher writing a treatise on how humans should ideally act and were examining the principal’s situation, on a scale of -5 (very ideal behaviour) through 0 (idealistcally neutral behaviour) to 5 (very non-ideal behaviour), what type of behaviour would the principal shutting down the newspaper be an example of? __
**Doctor’s dilemma**

1) On a scale of 0 (believe it is very bad) to 10 (believe it is very good), how would the lawmakers, i.e., the members of parliament that pass laws, feel towards the doctor giving an overdose of morphine when they draft laws on such issues? __

2) On a scale of 0 (strongly direct them to give the overdose of morphine) to 10 (strongly direct them not to give the overdose), how would someone who wanted to raise their children to be very moral individuals, tell their child how to deal with situations comparable to the doctor’s? __

3) On a scale of 0 (no punishment) to 10 (severe punishment), if the doctor gave an overdose of morphine, was taken to court and found guilty, how severe a punishment would he/she be likely to receive? __

4) On a scale of 0 (strongly punish) to 10 (strongly reward), how should society deal with individuals who perform actions comparable to the doctor giving an overdose of morphine? __

5) If the doctor gave an overdose of morphine, how right or wrong would this be on a scale from -5 (a very evil act) through 0 (neither good nor evil) to 5 (a very good act)? __

6) If the doctor gave an overdose of morphine, how severe a violation of the law would this be on a scale from 0 (a trivial infraction) to 10 (a severe transgression)? __

7) On a scale of 0 (very likely) to 10 (very unlikely), if the doctor gave an overdose of morphine, how likely would it be that the Director of Public Prosecutions would prosecute him/her to the full extent of the law? __

8) If you were a philosopher writing a treatise on how humans should ideally act and were examining the doctor’s situation, on a scale of -5 (very ideal behaviour) through 0 (idealistcally neutral behaviour) to 5 (very non-ideal behaviour), what type of behaviour would the doctor giving an overdose of morphine be an example of? __
Webster

1) On a scale of 0 (believe it is very bad) to 10 (believe it is very good), how would the lawmakers, i.e., the members of parliament that pass laws, feel towards Mr Webster NOT hiring Mr Lee when they draft laws on such issues? __

2) On a scale of 0 (strongly direct them not to hire Mr Lee) to 10 (strongly direct them to hire Mr Lee), how would someone who wanted to raise their children to be very moral individuals, tell their child how to deal with situations comparable to Mr Webster's?__

3) On a scale of 0 (no punishment) to 10 (severe punishment), if Mr Webster failed to hire Mr Lee, was taken to court and found guilty, how severe a punishment would he be likely to receive? __

4) On a scale on 0 (strongly punish) to 10 (strongly reward), how should society deal with individuals who perform actions comparable to Mr Webster failing to hire Mr Lee?__

5) If Mr Webster did NOT hire Mr Lee, how right or wrong would this be on a scale from -5 (a very evil act) through 0 (neither good nor evil) to 5 (a very good act)? __

6) If Mr Webster did NOT hire Mr Lee, how severe a violation of the law would this be on a scale from 0 (a trivial infraction) to 10 (a severe transgression)? __

7) On a scale of 0 (very likely) to 10 (very unlikely), if Mr Webster did NOT hire Mr Lee, how likely would it be that the Director of Public Prosecutions would prosecute him to the full extent of the law?__

8) If you were a philosopher writing a treatise on how humans should ideally act and were examining Mr Webster’s situation, on a scale of -5 (very ideal behaviour) through 0 (idealistcally neutral behaviour) to 5 (very non-ideal behaviour), what type of behaviour would Mr Webster’s failure to hire Mr Lee be an example of?__
Student take-over

1) On a scale of 0 (believe it is very bad) to 10 (believe it is very good), how would the lawmakers, i.e., the members of parliament that pass laws, feel towards the students taking over the administration building when they draft laws on such issues? __

2) On a scale of 0 (strongly direct them to take over the administration block) to 10 (strongly direct them not to take over the administration block), how would someone who wanted to raise their children to be very moral individuals, tell their child how to deal with situations comparable to the students’? __

3) On a scale of 0 (no punishment) to 10 (severe punishment), if the students took over the administration block, were taken to court and found guilty, how severe a punishment would they be likely to receive? __

4) On a scale of 0 (strongly punish) to 10 (strongly reward), how should society deal with individuals who perform actions comparable to the students taking over the administration block? __

5) If the students took over the administration block, how right or wrong would this be on a scale from -5 (a very evil act) through 0 (neither good nor evil) to 5 (a very good act)? __

6) If the students took over the administration block, how severe a violation of the law would this be on a scale from 0 (a trivial infraction) to 10 (a severe transgression)? __

7) On a scale of 0 (very likely) to 10 (very unlikely), if the students took over the administration block, how likely would it be that the Director of Public Prosecutions would prosecute them to the full extent of the law? __

8) If you were a philosopher writing a treatise on how humans should ideally act and were examining the student’s situation, on a scale of -5 (very ideal behaviour) through 0 (idealistcally neutral behaviour) to 5 (very non-ideal behaviour), what type of behaviour would the students takeover of the administration building be an example of? __
A.5 PIC Score Reliability Complications and Corrections

There is a theoretical difficulty with use an internal consistency reliability measure such as Cronbach’s Alpha to compute the reliabilities of the perceived illegality and perceived immorality measures (that, in turn, are utilised to calculate PIC scores). Using Cronbach’s Alpha to assess reliability this way is complicated by the fact that Cronbach’s Alpha will be lowered if some individuals rate some actions as very illegal/immoral and some actions as not very illegal/immoral but other individuals rate these actions as equally illegal/immoral.

Internal consistency reliability essentially estimates the degree to which a test correlates with itself. This is perfectly reasonable if each item in the instrument contributes to the same variable in a straightforward manner. However, the way perceived illegality and perceived immorality ratings are utilised is not this straightforward. The problem (using perceived illegality ratings as our example) is that a respondent may believe that one act (e.g., Heinz stealing the drug) is highly illegal but another act is not highly illegal. As long as there is a degree of consistency amongst ratings with the same act, this will not be an issue in terms of the proper functioning of the test. However, an internal consistency measure such as Cronbach’s $\alpha$ will be decreased because there will be negative correlations between the items of different acts. Indeed, it is essential that there are differences in the perceived illegality and perceived immorality ratings because it would be inappropriate to calculate correlations (such as PIC scores) if the underlying variables did not vary.
Just giving the reliability estimates for each act also seems inappropriate because we are examining one concept – that of perceived illegality or perceived immorality. We are not interested in perceived illegality of Heinz stealing the drug. We are interested in the concept of perceived illegality across all the dilemmas (our sample of situations). In short, a reasonable internal consistency approach needs to acknowledge that although perceived illegality and perceived immorality scores are constructed from 24 items scales (6 dilemmas x 4 items per dilemma), you can only really examine reliability within each dilemma.

One way to do this is to examine the reliability estimate for each act and then predict what the reliability of the whole test would be from this estimate. Cronbach (1960) notes that the reliability of a lengthened test can be predicted across using the Spearman-Brown formula that is presented below.

\[
r_n = \frac{nr}{1 + (n-1)r}
\]

where \(r\) is the original reliability and \(r_n\) is the reliability of the test \(n\) times as long.

In our case we wish to predict the reliability of the whole 24 item perceived illegality and perceived immorality measures from the 4-item measure we have for each dilemma. Thus, in our case, \(n=24/4=6\), \(r\) is the Cronbach \(\alpha\) of the set of 4 items in question and \(r_n\) is the predicted Cronbach’s \(\alpha\) for the 24 item measure.

An important question arises namely “from which dilemma’s 4 items, should we be predicting the reliability of the whole test?” Perhaps an argument could be made for predicting the reliability from the average of these measures. However, in order to be
conservative, a better approach would be to extrapolate from the worse case – i.e., the dilemma with the set of 4 items with the lowest reliability.

Table A.1 lists the reliability for the 4 items of each dilemma for perceived illegality and perceived immorality ratings and the resultant reliability prediction for the whole test. Using our worse case criteria, we would consequently predict a reliability of 0.77 for the perceived illegality items and 0.89 for the perceived immorality items.
Table A.1

*Study 1 – Predictions of Perceived Illegality and Perceived Immorality Ratings’*

*Reliability*

<table>
<thead>
<tr>
<th>Item Set</th>
<th>Reliability Across</th>
<th>Reliability For Whole</th>
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<tbody>
<tr>
<td>4 Items</td>
<td></td>
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<tr>
<td>Heinz Illegality&lt;sup&gt;1&lt;/sup&gt;</td>
<td>.62</td>
<td>.91</td>
</tr>
<tr>
<td>Prisoner Illegality&lt;sup&gt;1&lt;/sup&gt;</td>
<td>.52</td>
<td>.87</td>
</tr>
<tr>
<td>Newspaper Illegality&lt;sup&gt;1&lt;/sup&gt;</td>
<td>.36</td>
<td>.77</td>
</tr>
<tr>
<td>Doctor Illegality&lt;sup&gt;1&lt;/sup&gt;</td>
<td>.49</td>
<td>.85</td>
</tr>
<tr>
<td>Webster Illegality&lt;sup&gt;1&lt;/sup&gt;</td>
<td>.56</td>
<td>.88</td>
</tr>
<tr>
<td>Students Illegality&lt;sup&gt;1&lt;/sup&gt;</td>
<td>.52</td>
<td>.87</td>
</tr>
<tr>
<td>Heinz Immorality&lt;sup&gt;1&lt;/sup&gt;</td>
<td>.65</td>
<td>.92</td>
</tr>
<tr>
<td>Prisoner Immorality&lt;sup&gt;1&lt;/sup&gt;</td>
<td>.69</td>
<td>.93</td>
</tr>
<tr>
<td>Newspaper Immorality&lt;sup&gt;1&lt;/sup&gt;</td>
<td>.68</td>
<td>.93</td>
</tr>
<tr>
<td>Doctor Immorality&lt;sup&gt;1&lt;/sup&gt;</td>
<td>.83</td>
<td>.97</td>
</tr>
<tr>
<td>Webster Immorality&lt;sup&gt;1&lt;/sup&gt;</td>
<td>.57</td>
<td>.89</td>
</tr>
<tr>
<td>Students Immorality&lt;sup&gt;1&lt;/sup&gt;</td>
<td>.62</td>
<td>.91</td>
</tr>
</tbody>
</table>

<sup>1</sup> Heinz, Prisoner, Newspaper, Doctor, Webster and Students refer to different DIT dilemmas. Illegality and Immorality respectively refer to whether the respondent rated the illegality or the immorality of the act in the dilemma.
Reliability Across 4 Items refers to the observed Cronbach’s α across the 4 items in the set being referred to – e.g., the Cronbach’s α calculated across the 4 items used to assessed the perceived illegality of Heinz stealing the drug.

Reliability For Whole Test refers to the predicted reliability of either the perceived illegality or perceived immorality measure (each 24 items in length) using the observed reliability for the set of 4 items.
Appendix B

Study 2 Methodological Details

B.1 Purging of Participants

As discussed in Chapter 5, 2 participants were purged from the Study 2 sample due to failing the DIT-CON reliability checks. These were equivalent to the DIT reliability checks recommended by Rest et al. (1999c) and described in Appendix B “Purging of Participants” section. Unfortunately, the data of the purged participants was lost and thus which criteria each failed cannot be listed.

B.2 Political Questionnaire

This questionnaire was employed in Study 2 to measure liberalism-conservatism. This questionnaire was identical to that employed in Study 1 and scores were calculated identically to the way that they were in Study 1. As it was described and presented in Appendix Section A.2, it will not be reproduced here.

B.3 DIT-CON Questionnaire

The Conservative Defining Issues Test (DIT-CON) was employed in Study 2 as an alternate measure of moral reasoning to the DIT. Because it was designed purely to be a conservative analogue to the DIT, the format and written instructions were copied from the DIT (as can be seen below). The DIT-CON is scored in an identical fashion to the DIT (as discussed in Chapter 5).
Opinions about Social Problems

The purpose of this questionnaire is to help us understand how people think about social problems. Different people have different opinions about questions of right and wrong. There are no “right” answers to such problems in the way that math problems have right answers. We would like you to tell us what you think about several problem stories.

You will be asked to read a story from this booklet. Then you will be asked to answer the questions that appear below that story. If you wish to change an answer, please feel free to do so but make sure it is clear what your final answer is.

In order to illustrate how we would like you to answer the questions, consider the following story:

**Frank and the Car**

Frank Jones has been thinking about buying a car. He is married, has two small children and earns an average income. The car he buys will be his family’s only car. It will be used mostly to get to work and drive around town, but sometimes for vacation trips also. In trying to decide what car to buy, Frank Jones realised that there were a lot of questions to consider. For instance, should he buy a larger used car or a smaller new car for about the same amount of money? Other questions occur to him.

What should Frank do? (Tick one)

__ Buy new car       __ Can’t decide  __ Buy old car

<table>
<thead>
<tr>
<th>IMPORTANCE</th>
<th>Item</th>
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<tbody>
<tr>
<td>Great</td>
<td>Much</td>
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<tr>
<td>2. Would a new car be more economical in the long run than a new car.</td>
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<td>3. Whether the colour was green, Frank’s favourite colour.</td>
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<tr>
<td>4. Whether the cube inch displacement was at least 200.</td>
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<tr>
<td>5. Would a large roomy car be better than a compact car.</td>
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<tr>
<td>6. Whether the front connibilies were differential.</td>
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</table>

From the list of items, select the four most important:

Most Important Item __
Second Most Important Item __
Third Most Important Item __
Fourth Most Important Item __
We note that this is not really a social problem, but it will illustrate our instructions. After reading the story, you will firstly be asked to indicate your recommendation for what a person should do. If you tend to favour one action or another (even if you are not completely sure), indicate which one. If you do not favour either action, mark the circle by “can’t decide”.

Next read each of the items numbered 1 to 12 (though there are only 6 in this example). Think of the issue that item is raising. If the issue is important in making a decision, one way or the other, then mark the box corresponding to “great”. If that issue is not important or doesn’t make sense to you, mark “no”. If the issue is relevant but not critical, mark “much”, “some” or “little” – depending on how much importance that issue has in your opinion. You may mark several items as “great” (or any other level of importance) – there is no fixed number of items that must be marked at any one level.

After you ticked one box for each item on the left hand side of the items (i.e., indicated its importance), you will be asked to choose the item that is the most important consideration out of all the items printed there. Pick from among the items provided even if you think that none of the items are of “great” importance. Of the items that are presented there, pick one as the most important (relative to the others), then the second most important, third and fourth most important.

Note that in our sample responses, the first item was considered irrelevant; the second item was considered as a critical issue in making a decision; the third item was considered of only moderate importance; the fourth item was not clear to the person responding whether 200 was good or not, so it was marked “no”; the fifth item was also of critical importance; and the sixth item didn’t make any sense so it was marked “no”.

Note that the most important items comes from one of the items marked on the far left hand side. In deciding between item #2 and #5, a person should reread these items, then put one of them as the most important, and the other item as second, etc.

The first story begins on the next page.
Sue and Louise

Sue is a single mother and the owner of a shop that needs to be open long hours to obtain sufficient business. Sue hires a person called Louise to run the shop when she’s not there. Before working in the shop, Louise had been unemployed for about a year and was almost totally broke when Sue finally hired her. After expenses the shop makes just enough money for Sue to support herself and her two children.

After working in the shop for a few months but not long enough to earn maternity leave, Louise becomes pregnant and becomes increasingly unable to perform her duties. New anti-discrimination legislation requires Sue to find alternate duties for Louise to perform and deems it illegal to fire her. However, in a small business like Sue’s shop, finding alternate duties becomes increasingly difficult. Sue cannot afford to hire a third person. Sue considers firing Louise and hiring somebody new so she doesn’t have to close her shop.

Should Sue fire Louise? (Tick one)

__ Should fire her  ___ Can’t decide  ___ Should not fire her

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<th>IMPORTANCE</th>
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From the list of items, select the four most important:

Most Important Item __
Second Most Important Item __
Third Most Important Item __
Fourth Most Important Item __
Phil and the Addicts

Phil runs a grocery shop. As this shop is near many different transportation routes, drug dealers have realised that this is a good place to do business and can frequently be found near Phil’s shop. They have also attracted many drug addicts who sometimes pass out in front of Phil’s shop and harass and intimidate the store’s clientele.

The drug addicts ignore Phil’s requests that they leave and, while Phil has repeatedly called the police, they seem unwilling or unable to deal with the problem. Lately some customers have been saying that they are too scared to go to Phil’s shop. Phil considers physically attacking the addicts in order to force them to leave.

Is it right for Phil to do this? (Tick one)

___ Yes, Phil should attack them  ___ Can’t decide  ___ No, Phil should not attack them

**IMPORTANCE**

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<thead>
<tr>
<th>Great</th>
<th>Much</th>
<th>Some</th>
<th>Little</th>
<th>No</th>
<th>Item</th>
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</table>

From the list of items, select the four most important:

Most Important Item __
Second Most Important Item __
Third Most Important Item __
Fourth Most Important Item __
Joe is an Eskimo whaler and comes from a tradition of whaling. Usually, in a given season, Joe will catch about 20 whales. However, for many years, commercial whaling boats have each been catching hundreds of whales each season. This has seriously depleted the stocks of whales and consequently many people have become concerned.

As a result, the United Nations passes a resolution outlawing the hunting of whales and, subsequently, Joe’s government signs a treaty and passes a law banning whaling despite considerable community opposition. Due to the shortage of whale products, a black market emerges where prices are about four times what they were. As Joe is 40 years old and has few other skills with which to earn money, he considers continuing to whale to support himself. Because of the black market, if Joe does keep whaling, he will only hunt 5 whales a season.

Should Joe continue to whale?  (Tick one)

__ Should continue whaling       __ Can’t decide       __ Should not continue whaling

<table>
<thead>
<tr>
<th>Importance</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Great</td>
<td>If an individual’s right to choose their job is more important than the protection of the environment.</td>
</tr>
<tr>
<td>2. Much</td>
<td>Whether whales would place great importance on the consideration of justice.</td>
</tr>
<tr>
<td>3. Some</td>
<td>Whether the government indicates that they believe that this law only applies to the commercial whalers.</td>
</tr>
<tr>
<td>4. Little</td>
<td>Whether Joe is violating national and international law.</td>
</tr>
<tr>
<td>5. No</td>
<td>Should a government have the authority to pass laws that directly damage citizens’ quality of life without improving the lot of others?</td>
</tr>
<tr>
<td>6. No</td>
<td>Whose authority is final in this situation.</td>
</tr>
<tr>
<td>7.</td>
<td>Whether Joe’s continuing to whale will result in him having a relatively better life.</td>
</tr>
<tr>
<td>8.</td>
<td>Whether we should be treating animals as mere resources or as co-inhabitants of this planet with corresponding rights.</td>
</tr>
<tr>
<td>9.</td>
<td>Is Joe’s way of life going to be crushed by a bunch of petty UN bureaucrats?</td>
</tr>
<tr>
<td>10.</td>
<td>Whether Joe’s whaling is following traditional Eskimo culture.</td>
</tr>
<tr>
<td>11.</td>
<td>Whether the government just passed the law due to international pressure.</td>
</tr>
<tr>
<td>12.</td>
<td>What would a good citizen do?</td>
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</table>

From the list of items, select the four most important:

Most Important Item __
Second Most Important Item __
Third Most Important Item __
Fourth Most Important Item __
Deborah and her Shotgun

Deborah is a farmer with a farm just south of Brisbane. One of the problems her farm faces is wild boar attacks. Such animals are very strong and powerful and, as well as destroying livestock, maim and kill humans. When a boar is charging, it is very hard to stop. Indeed, it takes an accurate shot from a powerful shotgun to bring such an animal down.

For her protection, Deborah uses a pump-action shotgun because this makes it relatively easy to fire multiple shells. However, these weapons are illegal because criminals have been known to steal these weapons and then use them in violent crimes. Indeed, many years ago such a shotgun was stolen from Deborah’s farm and used in an armed robbery. Deborah is able to relinquish her weapon without being arrested or charged.

Should Deborah relinquish her pump action shotgun? (Tick one)

__ Should relinquish it       __ Can’t decide  __ Should not relinquish it

**IMPORTANCE**

<table>
<thead>
<tr>
<th>Great</th>
<th>Much</th>
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<td></td>
<td>1. Would Deborah relinquishing her weapon actually make the community safer?</td>
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<td>2. How difficult would complying with the law make it be for Deborah to defend herself?</td>
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<td>3. That we should obey a law even if we disagree with it.</td>
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<td>4. That the preservation of human life is tied to the influence of boar government ministers</td>
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<td>5. Whether Deborah’s rights to defend herself are going to be mercilessly trampled on by a cold-hearted government.</td>
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<td>6. What is the honourable course of action.</td>
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<td>7. Would the authorities acknowledge that Deborah’s was a special case and turn a blind eye towards her.</td>
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<td>8. Whether keeping the shotgun would be deceitful.</td>
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<td>9. Whether Deborah’s motives for keeping the shotgun are pure.</td>
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<td>10. Whether Deborah’s actions are compatible with and guided by her moral principles.</td>
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<td></td>
<td>11. Could Deborah’s actions encourage other people to keep such weapons despite lacking a compelling reason?</td>
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<td></td>
<td></td>
<td></td>
<td>12. Whether the principle of self-defence overrides all other concerns.</td>
</tr>
</tbody>
</table>

From the list of items, select the four most important:

Most Important Item__
Second Most Important Item__
Third Most Important Item__
Fourth Most Important Item__
Policeman’s Dilemma

Peter is a detective in the police force. Currently he is investigating a string of bank robberies – the last of which resulted in a person getting killed. The word on the street, from several reliable informants, is that a certain gang of criminals committed the crime. However, the search for evidence has been fruitless. Believing his sources to be accurate, Peter considers planting incriminating evidence on the suspects in order to arrest them and, ultimately, send them to gaol.

Should Peter plant the evidence? (Tick one)

__ Should plant it       __ Can’t decide       __ Should not plant it

<p>| IMPORTANCE | 1. Whether acting this way will make Peter’s behaviour flawed in the same way as the gang’s. |</p>
<table>
<thead>
<tr>
<th>Great</th>
<th>Much</th>
<th>Some</th>
<th>Little</th>
<th>No</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2. Whether infringing on the rights of the gang would help protect the rights of others.</td>
</tr>
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<td></td>
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<td></td>
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<td></td>
<td>3. Whether criminals have a legal obligation to ignore robbery warrants.</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4. That the evidence would be illegally obtained</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5. Whether criminals should be treated in the same way that they treat others.</td>
</tr>
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<td></td>
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<td></td>
<td>6. Whether the law or the law enforcer is the higher authority.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7. Whether it is hypocritical to break the law to catch law-breakers.</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8. That Peter is attempting to act in the interests of the community.</td>
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<td></td>
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<td></td>
<td>9. That this is just another example of the repressive practices of the police.</td>
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<td></td>
<td>10. Whether planting the evidence is compatible with the principles of justice.</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11. Whether criminal investigations should observe certain procedures to avoid the possibility of adversely affecting innocent people.</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12. Whether Peter will be promoted if he catches the criminals.</td>
</tr>
</tbody>
</table>

From the list of items, select the four most important:

Most Important Item __
Second Most Important Item __
Third Most Important Item __
Fourth Most Important Item __
The Clinic

Mortvale is a suburb where a council-approved drug-rehabilitation clinic exists. However, the clinic attracts many individuals of unknown character to the area. Moreover, it is located besides a popular park that attracts children and adolescents of all ages. Many residents have unsuccessfully lobbied the council to close the clinic.

In response to this rejection, the residents blockade the clinic and harass anyone entering or exiting it. However, the police arrive and inform them that they must disperse and cease their protesting. The residents consider continuing the protest regardless.

Should they maintain the protest? (Tick one)

__ Should keep protesting       __ Can’t decide       __ Should not keep protesting

<table>
<thead>
<tr>
<th>IMPORTANT</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great</td>
<td>1. Wouldn’t their actions encourage the harassment of other people?</td>
</tr>
<tr>
<td>Much</td>
<td>2. Whether the residents are acting out of principle.</td>
</tr>
<tr>
<td>Some</td>
<td>3. That protesting by clinics is empowering for local playgrounds.</td>
</tr>
<tr>
<td>Little</td>
<td>4. That some residents might feel betrayed if others leave.</td>
</tr>
<tr>
<td>No</td>
<td>5. Whether maintaining the protest will make the residents politically powerful.</td>
</tr>
<tr>
<td></td>
<td>6. Whether the drug use is inherently immoral.</td>
</tr>
<tr>
<td></td>
<td>7. That the protestors should respect the police’s responsibility to maintain order.</td>
</tr>
<tr>
<td></td>
<td>8. Isn’t it natural for a parent to want to shield their children from drugs?</td>
</tr>
<tr>
<td></td>
<td>9. That people have the absolute right to protest when vulnerable individuals are placed at risk.</td>
</tr>
<tr>
<td></td>
<td>10. How should a community respond when its pleas are ignored by its governments?</td>
</tr>
<tr>
<td></td>
<td>11. That the council approved the location of the clinic.</td>
</tr>
<tr>
<td></td>
<td>12. Whether the presence of the clinic would harm children.</td>
</tr>
</tbody>
</table>

From the list of items, select the four most important:

Most Important Item __
Second Most Important Item __
Third Most Important Item __
Fourth Most Important Item __
B.4 DIT-CON PIC Questionnaire

The DIT-CON PIC questionnaire was used to calculate PIC scores in Study 2. As discussed in Chapter 5, this is a modified version of the questionnaire employed to measure PIC scores in Study 1. Note that as well as new items being added, this version of the PIC questionnaire now refers to DIT-CON dilemmas instead of DIT dilemmas (because, in Study 2, we were interested in participants’ moral reasoning on issues important to conservatives).
INSTRUCTIONS

We are interested in your opinions on various social problems. Inside this booklet, you will find six scenarios in which a person has to make a decision whether or not to do something. Later on, you will find a series of questions about each scenario. The questions for each scenario are on separate pages and you can match them to the scenario description by title.

Please read the first scenario and answer the questions for that scenario. Then read the questions for the second scenario and answer the questions for that scenario and so on. There are no right or wrong answers to the questions so please answer honestly – we are genuinely interested in your opinions. Do not agonise over the answers but don’t rush either.

Thank you for your participation in this study.
Sue and Louise

1) On a scale of 0 (believe it is very bad) to 10 (believe it is very good), how would the lawmakers, i.e., the members of parliament that pass laws, feel towards Sue firing Louise when they draft laws on such issues? __

2) On a scale of 0 (strongly direct them to fire Louise) to 10 (strongly direct them not to fire Louise), how would someone who wanted to raise their children to be very moral individuals, tell their child how to deal with situations comparable to Sue’s? __

3) On a scale of 0 (no punishment) to 10 (severe punishment), if Sue fired Louise, was taken to court and found guilty, how severe a punishment would she be likely to receive? __

4) On a scale of 0 (strongly punish) to 10 (strongly reward), how should society deal with individuals who perform actions comparable to Sue firing Louise? __

5) If Sue fired Louise, how right or wrong would this be on a scale from -5 (a very evil act) through 0 (neither good nor evil) to 5 (a very good act)? __

6) If Sue fired Louise, how severe a violation of the law would this be on a scale from 0 (a trivial infraction) to 10 (a severe transgression)? __

7) On a scale of 0 (very likely) to 10 (very unlikely), if Sue fired Louise, how likely would it be that the Director of Public Prosecutions would prosecute her to the full extent of the law? __

8) If you were a philosopher writing a treatise on how humans should ideally act and were examining Sue’s situation, on a scale of -5 (very ideal behaviour) through 0 (idealistically neutral behaviour) to 5 (very non-ideal behaviour), what type of behaviour would Sue’s firing of Louise be an example of? __

9) On a scale of 0 (very reluctant) to 10 (very keen), how keen would the police be to file charges against Sue if she fired Louise? __

10) On a scale of –5 (make it much worse) through 0 (not affect it) to 5 (make it much better), if actions such as Sue firing Louise became very widespread, would it make the world a better place? __

11) On a scale of 0 (very incompatible) to 10 (not incompatible), how incompatible is Sue firing Louise with the spirit of relevant law? __

12) Imagine you are Sue. On a scale of 0 (very fair) to 10 (very unfair), how fair would it be if Sue fired Louise? __

13) Imagine you are Louise. On a scale of 0 (very fair) to 10 (very unfair), how fair would it be if Sue fired Louise? __
Phil and the Addicts

1) On a scale of 0 (believe it is very bad) to 10 (believe it is very good), how would the lawmakers, i.e., the members of parliament that pass laws, feel towards Phil attacking the addicts when they draft laws on such issues? __

2) On a scale of 0 (strongly direct them to attack the addicts) to 10 (strongly direct them not to attack the addicts), how would someone who wanted to raise their children to be very moral individuals, tell their child how to deal with situations comparable to Phil’s? __

3) On a scale of 0 (no punishment) to 10 (severe punishment), if Phil attacked the addicts, was taken to court and found guilty, how severe a punishment would he be likely to receive? __

4) On a scale of 0 (strongly punish) to 10 (strongly reward), how should society deal with individuals who perform actions comparable to Phil attacking the addicts? __

5) If Phil attacked the addicts, how right or wrong would this be on a scale from -5 (a very evil act) through 0 (neither good nor evil) to 5 (a very good act)? __

6) If Phil attacked the addicts, how severe a violation of the law would this be on a scale from 0 (a trivial infraction) to 10 (a severe transgression)? __

7) On a scale of 0 (very likely) to 10 (very unlikely), if Phil attacked the addicts, how likely would it be that the Director of Public Prosecutions would prosecute him to the full extent of the law? __

8) If you were a philosopher writing a treatise on how humans should ideally act and were examining Phil’s situation, on a scale of -5 (very ideal behaviour) through 0 (idealistically neutral behaviour) to 5 (very non-ideal behaviour), what type of behaviour would Phil attacking the addicts be an example of? __

9) On a scale of 0 (very reluctant) to 10 (very keen), how keen would the police be to file charges against Phil if he attacked the addicts? __

10) On a scale of –5 (make it much worse) through 0 (not affect it) to 5 (make it much better), if actions such as Phil attacking the addicts became very widespread, would it make the world a better place? __

11) On a scale of 0 (very incompatible) to 10 (not incompatible), how incompatible is Phil attacking the addicts with the spirit of relevant law? __

12) Imagine you are Phil. On a scale of 0 (very fair) to 10 (very unfair), how fair would it be if Phil attacked the addicts? __

13) Imagine you are one of the addicts. On a scale of 0 (very fair) to 10 (very unfair) how fair would it be Phil attacked the addicts? __
Joe and Whaling

1) On a scale of 0 (believe it is very bad) to 10 (believe it is very good), how would the lawmakers, i.e., the members of parliament that pass laws, feel towards Joe continuing to whale when they draft laws on such issues? __

2) On a scale of 0 (strongly direct them to continue whaling) to 10 (strongly direct them not to continue whaling), how would someone who wanted to raise their children to be very moral individuals, tell their child how to deal with situations comparable to Joe’s? __

3) On a scale of 0 (no punishment) to 10 (severe punishment), if Joe continued whaling, was taken to court and found guilty, how severe a punishment would he be likely to receive? __

4) On a scale of 0 (strongly punish) to 10 (strongly reward), how should society deal with individuals who perform actions comparable to Joe continuing to whale? __

5) If Joe continued to whale, how right or wrong would this be on a scale from -5 (a very evil act) through 0 (neither good nor evil) to 5 (a very good act)? __

6) If Joe continued to whale, how severe a violation of the law would this be on a scale from 0 (a trivial infraction) to 10 (a severe transgression)? __

7) On a scale of 0 (very likely) to 10 (very unlikely), if Joe continued to whale, how likely would it be that the Director of Public Prosecutions would prosecute him to the full extent of the law? __

8) If you were a philosopher writing a treatise on how humans should ideally act and were examining Joe’s situation, on a scale of -5 (very ideal behaviour) through 0 (idealistically neutral behaviour) to 5 (very non-ideal behaviour), what type of behaviour would Joe continuing to whale be an example of? __

9) On a scale of 0 (very reluctant) to 10 (very keen), how keen would the police be to file charges against Joe if he continued to whale? __

10) On a scale of -5 (make it much worse) through 0 (not affect it) to 5 (make it much better), if actions such as Joe continuing to whale became very widespread, would it make the world a better place? __

11) On a scale of 0 (very incompatible) to 10 (not incompatible), how incompatible is Joe continuing to whale with the spirit of relevant law? __

12) Imagine you are Joe. On a scale of 0 (very fair) to 10 (very unfair), how fair would it be if Joe continued to whale? __

13) Imagine you are the population of whales. On a scale of 0 (very fair) to 10 (very unfair), how fair would it be if Joe continued to whale? __
Deborah and her Shotgun

1) On a scale of 0 (believe it is very bad) to 10 (believe it is very good), how would the lawmakers, i.e., the members of parliament that pass laws, feel towards Deborah keeping her shotgun when they draft laws on such issues? __

2) On a scale of 0 (strongly direct them to keep the shotgun) to 10 (strongly direct them not to keep the shotgun), how would someone who wanted to raise their children to be very moral individuals, tell their child how to deal with situations comparable to Deborah’s? __

3) On a scale of 0 (no punishment) to 10 (severe punishment), if Deborah kept her shotgun, was taken to court and found guilty, how severe a punishment would she be likely to receive? __

4) On a scale of 0 (strongly punish) to 10 (strongly reward), how should society deal with individuals who perform actions comparable to Deborah keeping her shotgun? __

5) If Deborah kept her shotgun, how right or wrong would this be on a scale from -5 (a very evil act) through 0 (neither good nor evil) to 5 (a very good act)? __

6) If Deborah kept her shotgun, how severe a violation of the law would this be on a scale from 0 (a trivial infraction) to 10 (a severe transgression)? __

7) On a scale of 0 (very likely) to 10 (very unlikely), if Deborah kept her shotgun, how likely would it be that the Director of Public Prosecutions would prosecute her to the full extent of the law? __

8) If you were a philosopher writing a treatise on how humans should ideally act and were examining Deborah’s situation, on a scale of -5 (very ideal behaviour) through 0 (idealistically neutral behaviour) to 5 (very non-ideal behaviour), what type of behaviour would Deborah keeping her shotgun be an example of? __

9) On a scale of 0 (very reluctant) to 10 (very keen), how keen would the police be to file charges against Deborah if she kept her shotgun? __

10) On a scale of -5 (make it much worse) through 0 (not affect it) to 5 (make it much better), if actions such as Deborah keeping her shotgun became very widespread, would it make the world a better place? __

11) On a scale of 0 (very incompatible) to 10 (not incompatible), how incompatible is Deborah keeping her shotgun with the spirit of relevant law? __

12) Imagine you are Deborah. On a scale of 0 (very fair) to 10 (very unfair), how fair would it be if Deborah kept her shotgun? __

13) Imagine you are the potential victim of an armed robbery. On a scale of 0 (very fair) to 10 (very unfair), how fair would it be if Deborah kept her shotgun? __
Policeman’s Dilemma

1) On a scale of 0 (believe it is very bad) to 10 (believe it is very good), how would the lawmakers, i.e., the members of parliament that pass laws, feel towards Peter planting evidence when they draft laws on such issues? __

2) On a scale of 0 (strongly direct them to plant evidence) to 10 (strongly direct them not to plant evidence), how would someone who wanted to raise their children to be very moral individuals, tell their child how to deal with situations comparable to Peter’s? __

3) On a scale of 0 (no punishment) to 10 (severe punishment), if Peter planted evidence, was taken to court and found guilty, how severe a punishment would he be likely to receive? __

4) On a scale of 0 (strongly punish) to 10 (strongly reward), how should society deal with individuals who perform actions comparable to Peter planting evidence? __

5) If Peter planted evidence, how right or wrong would this be on a scale from -5 (a very evil act) through 0 (neither good nor evil) to 5 (a very good act)? __

6) If Peter planted evidence, how severe a violation of the law would this be on a scale from 0 (a trivial infraction) to 10 (a severe transgression)? __

7) On a scale of 0 (very likely) to 10 (very unlikely), if Peter planted evidence, how likely would it be that the Director of Public Prosecutions would prosecute him to the full extent of the law? __

8) If you were a philosopher writing a treatise on how humans should ideally act and were examining Peter’s situation, on a scale of -5 (very ideal behaviour) through 0 (idealistically neutral behaviour) to 5 (very non-ideal behaviour), what type of behaviour would Peter planting evidence be an example of? __

9) On a scale of 0 (very reluctant) to 10 (very keen), how keen would the police be to file charges against Peter if he planted evidence? __

10) On a scale of –5 (make it much worse) through 0 (not affect it) to 5 (make it much better), if actions such as Peter planting evidence became very widespread, would it make the world a better place? __

11) On a scale of 0 (very incompatible) to 10 (not incompatible), how incompatible is Peter planting evidence with the spirit of relevant law? __

12) Imagine you are Peter. On a scale of 0 (very fair) to 10 (very unfair), how fair would it be if Peter planted evidence? __

13) Imagine you are a member of the criminal gang. On a scale of 0 (very fair) to 10 (very unfair), how fair would it be if Peter planted evidence? __
1) On a scale of 0 (believe it is very bad) to 10 (believe it is very good), how would the lawmakers, i.e., the members of parliament that pass laws, feel towards the residents continuing their protest when they draft laws on such issues? __

2) On a scale of 0 (strongly direct them to continue their protest) to 10 (strongly direct them not to continue their protest), how would someone who wanted to raise their children to be very moral individuals, tell their child how to deal with situations comparable to the residents’? __

3) On a scale of 0 (no punishment) to 10 (severe punishment), if the residents continued their protest, were taken to court and found guilty, how severe a punishment would they be likely to receive? __

4) On a scale of 0 (strongly punish) to 10 (strongly reward), how should society deal with individuals who perform actions comparable to the residents continuing their protest? __

5) If the residents continued their protest, how right or wrong would this be on a scale from -5 (a very evil act) through 0 (neither good nor evil) to 5 (a very good act)? __

6) If the residents continued their protest, how severe a violation of the law would this be on a scale from 0 (a trivial infraction) to 10 (a severe transgression)? __

7) On a scale of 0 (very likely) to 10 (very unlikely), if the residents maintained their protest, how likely would it be that the Director of Public Prosecutions would prosecute them to the full extent of the law? __

8) If you were a philosopher writing a treatise on how humans should ideally act and were examining the residents’ situation, on a scale of -5 (very ideal behaviour) through 0 (idealistcally neutral behaviour) to 5 (very non-ideal behaviour), what type of behaviour would the residents continuing to protest be an example of? __

9) On a scale of 0 (very reluctant) to 10 (very keen), how keen would the police be to file charges against the residents if they continued their protest? __

10) On a scale of –5 (make it much worse) through 0 (not affect it) to 5 (make it much better), if actions such as the residents continuing to protest, would it make the world a better place? __

11) On a scale of 0 (very incompatible) to 10 (not incompatible), how incompatible is the residents continuing to protest with the spirit of relevant law? __

12) Imagine you are a resident. On a scale of 0 (very fair) to 10 (very unfair), how fair would it be if the residents continued to protest? __

13) Imagine you are a client at the clinic. On a scale of 0 (very fair) to 10 (very unfair), how fair would it be if the residents continued to protest?
Appendix C

Study 3 Methodological Details

C.1 Frequency Histograms From Study 1

In Section 6.2, Cooper’s (1972; cited in Rest et al., 1974) moral comprehension measure was discussed. Section 6.3 noted that Thornton et al.’s (1991) data indicated the possibility of a floor effect. To avoid this issue arising for the Moral Comprehension Questionnaire, a greater range of moral reasoning was included within its questions (see Section 6.3). This range was determined by examining the pattern of responses to the DIT in Study 1. The next 6 pages present the histograms for Study 1 DIT stage 2, 3, 4, 5a, 5b and 6 scores.
Figure C.1. Study 1 – DIT Stage 2 Scores
Figure C.2. Study 1 – DIT Stage 3 Scores.
Figure C.3. Study 1 – DIT Stage 4 Scores.
Figure C.4. Study 1 – DIT Stage 5a Scores.
Figure C.5. Study 1 – DIT Stage 5b Scores.
Figure C.6. Study 1 – DIT Stage 6 Scores.
C.2  Purging of Participants

As discussed in the Method section of Chapter 6, 3 participants were purged from the Study 3 sample due to failing the DIT reliability checks. These reliability tests were described in Appendix Section A.1. While the cut-off points for the short form DIT are sometimes different to the full-length DIT cut-off points (e.g., the short form has a 150 cut-off for RtXRK scores), the 3 respondents who were excluded would have failed via either the full-length or short form criteria.

One participant bizarrely managed to lose his/her copy of the DIT during the study. This was counted as a purging via the criteria of missing ranks (12 in total) and missing ratings (36 in total). Another participant was purged because he/she produced a RtXRK score of 360, omitted 12 rankings and was non-discriminating on all 3 dilemmas.

The third participant failed to follow instructions and put multiple responses for each of the four rankings. This was noticed before data was sent away for scoring and thus his/her protocol was not sent for scoring. From the results of Study 1, such data results in high RtXRK scores as well as missing data and non-differentiation (assumedly because it confuses the scoring machine). In any case, it clearly demonstrates non-compliance with the test instructions and, consequently, any use of the data is thus rendered highly questionable.

C.3  Defining Issues Test – Short From

The short form of the DIT was employed in study 3 to measure moral reasoning. The short version is identical to the long form version except that it only consists of questions relating the to Heinz and the Drug, Escaped Prisoner and Newspaper dilemmas
only (Centre for the Study of Ethical Development, 1990). In study 3, participants were actually given a paper copy of the full-length DIT and told just to answer those dilemmas – this happens to be the first three dilemmas on the version participants were provided with. Because of the strong similarities between the version and because the full-length DIT was presented in Appendix Section A.2, it will not be presented here.

C.4 Verbal Comprehension Questionnaire

This questionnaire was employed to measure verbal comprehension in Study 3. As discussed in Chapter 6, the questionnaire was compromised of two-subsections from Stankov (1991). The Vocabulary section presented first followed by the Esoteric Analogies section.
Instructions

For each of the terms on this page, there is a word in bold followed by a list of phrases. Your task is to circle the phrase that is most similar in meaning to the word in bold.

E.g., Revolve: a gun, uprising, turn around, grow, decide
Here you would circle “turn around” as its meaning is most similar to revolve.

1) **Mumble**: Speak indistinctly, Complain, Handle awkwardly, Fall over something, Tear apart.
2) **Perspire**: Struggle, Sweat, Happen, Penetrate, Submit
3) **Gush**: Giggle, Spout, Sprinkle, Hurry, Cry
4) **Massive**: Strong and muscular, Thickly populated, Ugly and awkward, Huge and solid, Everlasting
5) **Feign**: Pretend, Prefer, Wear, Be cautious, Surrender
6) **Unwary**: Unusual, Deserted, Incautious, Sudden, Tireless
7) **Veer**: Change direction, Hesitate, Catch sight of, Cover with a thin layer, Slide
8) **Orthodox**: Conventional, Straight, Surgical, Right-angled, Religious
9) **Stripling**: Stream, Narrow path, Engraving, Lad, Beginner
10) **Salubrious**: Mirthful, Indecent, Salty, Mournful, Healthful
11) **Limpid**: Lazy, Crippled, Clear, Hot, Slippery
12) **Procreate**: Sketch, Inhabit, Imitate, Beget, Encourage
13) **Replete**: Full, Elderly, Resentful, Discredited, Restful
14) **Frieze**: Fringe of curls on the forehead, Statue, Ornamental band, Embroidery, Sherbet
15) **Treacle**: Sewing machine, Framework, Leak, Apple butter, Molasses
16) **Ignominious**: Inflammable, Elflike, Unintelligent, Disgraceful, Mysterious
17) **Abjure**: Make certain, Arrest, Renounce, Abuse, Lose
18) **Duress**: Period of time, Distaste, Courage, Hardness, Compulsion
Instructions

For each of the items on this page, you are presented with a pair of words in bold. There will always be a relationship between these words. Your task is to identify the relationship and apply the relationship to the third word (also in bold) in the question to determine which of the four choices is the correct answer.

E.g., **Light** is to **Dark** as **Happy** is to **Sad, Gay, Eager**
Here “dark” is the opposite of “light” so the answer should be the opposite to “happy”. You would circle “sad” as it is the only word that fits this relationship.

1) **Fire** is to **Hot** as **Ice** is to **Pole, Cold, Cream, White**
2) **Love** is to **Hate** as **Friend** is to **Lover, Pal, Obey, Enemy**
3) **Statue** is to **Shape** as **Song** is to **Beauty, Piano, Tune, Note**
4) **Ground** is to **Foot** as **Rail** is to **Wheel, Train, Iron, Station**
5) **Flame** is to **Heat** as **Rose** is to **Leaves, Scent, Thorn, Petals**
6) **Space** is to **Point** as **Time** is to **Clock, Eternal, Moment, Potion**
7) **Rain** is to **Hail** as **Dew** is to **Snow, Water, Cloud, Frost**
8) **Many** is to **Few** as **Often** is to **Frequent, Never, Always, Seldom**
9) **Better** is to **Worst** as **Slower** is to **Fast, Rapid, Quickest, Best**
10) **Surprise** is to **Strange** as **Fear** is to **Anxious, Terrible, Weak, Quick**
11) **Soon** is to **Never** as **Near** is to **Nowhere, Far, Away, Somewhere**
12) **Win** is to **Joy** as **Lose** is to **Fun, Sadness, Fail, Dream**
13) **Fox** is to **Wolf** as **Goat** is to **Dog, Sheep, Tiger, Bat**
14) **Gander** is to **Goose** as **Hog** is to **Cow, Root, Sow, Pig**
15) **Map** is to **Geography** as **Blueprint** is to **House, Architecture, Foundation, Geology**
16) **Fore** is to **Aft** as **Bow** is to **Stern, Deck, Boat, Arrow**
17) **Homicide** is to **Law** as **Oedema** is to **Acting, Pedagogy, Theology, Medicine**
18) **Cat** is to **Feline** as **Horse** is to **Canine, Vulpine, Equine, Carnivore**
19) **Three** is to **Triangle** as **Five** is to **Hexagon, Pentagon, Circle, Trapezoid**
20) **Armadillo** is to **Animal** as **Chard** is to **Vegetable, Drink, Fish, Lizard**
21) **Constellation** is to **Star** as **Archipelago** is to **Peninsular, Island, Continent, Country**
22) **Lenore** is to **Poe** as **Alice** is to **Whitman, Shakespeare, Carrol, Byron**
23) **Gustatory** is to **Taste** as **Olfactory** is to **Touch, Smell, Feel, Balance**
24) **Virgil** is to **Aenid** as **Mathew** is to **Psalms, Mark, Gospel, Jesus**
C.5 Moral Comprehension Questionnaire

This questionnaire is the instrument that was used to assess moral comprehension in Study 3. It is not the final instrument that was employed in Study 4 to measure moral comprehension as it contains additional items (this final version is presented in Appendix D).

Note that participants were shown an overhead together with verbal instructions before answering each section. This are respectively labelled “overhead” (e.g., “Section 1 Overhead”) and “verbal instructions” (e.g., “Section 1 Verbal Instructions”). What the participants actually received is labelled “questions” (e.g., “Section 1 Questions”).
Initial Verbal Instructions

In a moment, you will be asked to complete a questionnaire divided into four sections – one at a time. There will be separate instructions for each but here is some initial information that applies to all four sections.

In previous research, we asked first year psychology students such as yourself to express whether they supported, opposed or were neutral to a given political policy. We also asked them to explain why they took that position. Each questionnaire presents several of these explanations although we have changed the names of the students to protect their anonymity.

We are interested in examining your understanding of these statements.

We noticed that several of the students seemed confused about the definitions of “multiculturalism” and “work for the dole”. The following overhead provides definitions of these policies.
Definitions Overhead

Multiculturalism – “A policy where migrants to a country are encouraged to practice the culture of their prior homeland.” This is distinct to the policy of “assimilation” where migrants are encouraged to adopt the culture of their new homeland (although both policies encourage immigration from a diverse range of cultural backgrounds).

Work for the Dole – “A policy that requires recipients of unemployment benefits (i.e., “dole”, “welfare”) to work for those benefits as opposed to receiving them unconditionally.”
Section 1 Verbal Instructions
(to be presented with following overhead)

Section 1 contains items in the same format to the item on the overhead. Please read the first part of the question.

For the first part of the question, you would circle (b) as it is the correct answer. Anon says that current form is most important (“You have to field the best team on the day”) and that the player doesn’t have it (“The player isn’t good enough anymore.”).

Note that we are not interested whether you think these statements are true or not or whether you think the player should or shouldn’t be included. We just want you to indicate what Anon’s reasoning says about his or her position on the issue.

Please read the second part of the question.

For the second part of the question, you would circle (c) as it is the correct answer.
(a) is wrong because Anon makes no such claims.
(b) is wrong because Anon mentions form not age.
(c) is correct as it appears to rephrase the argument.
(d) is wrong because it is incomplete. Anon does say this but this only justifies his position when combined with the fact that you have to choose the best team.
(e) is wrong because it is incomplete. Anon does say this but this only justifies his position when combined with the fact that the player is not playing well.

For all the questions, please circle which answer you feel is correct and do not justify you answer. Remember that we are not interested in your opinions on these issues but in your understanding of other’s positions.

Where something is listed as an overhead – e.g., “Section 1 overhead” – this was not part of the test package received by respondents but shown to them before they answered that section. The experimenter explained how to answer each section’s question using the example provided on the overhead.
Section 1 Overhead

When asked to explain his position on whether a great soccer player, who is past his prime, should play in a national team, Anon said “I think you have to field the best team on the day. What happened in the past is in the past. The player isn't good enough anymore.”

(i) Would Anon
(a) support the player playing in the team
(b) oppose the player playing in the team
(c) be undecided

(ii) Which of the following items most accurately represents Anon’s reason?

(a) We should give special treatment to veteran sports stars.
(b) When a player reaches a certain age, they should automatically be dropped from their national side.
(c) Only the best players should play on the team and the player in question is no longer one of those players.
(d) The player in question is no longer a good player.
(e) You have to field the best team on the day.
Section 1 Questions

1) When asked to explain his position on capital punishment, Joe remarked “Both criminals and their victims have rights. We need to examine whether depriving crooks of their right to life is balanced by protecting the right of justice for any victim’s loved ones.”

   (i) Would Joe
       (a) support capital punishment
       (b) oppose capital punishment
       (c) be undecided

   (ii) Which of the following items most accurately represents Joe’s reason?

       (a) We all have rights and while crime victims have rights, the right to life of criminals is more important.
       (b) We all have rights and while criminals have rights, the rights of victims are more important.
       (c) We need to balance the interests of criminals and their victims.
       (d) We need to analyse how the rights of criminals and their victims are affected.
       (e) We need to examine the balanced rights of criminals and their victims and deprive and protect them.

2) When asked about his position on condom vending machines, Lee declared “While there’s nothing wrong with them per se, they encourage a culture of promiscuity. Such a culture is against God’s way of living. God dictates that we should be chaste except in marriage.”

   (i) Would Lee
       (a) support condom vending machines
       (b) oppose condom vending machines
       (c) be undecided

   (ii) Which of the following items most accurately represents Lee’s reason?

       (a) Condom vending machines lead to behaviour that is against the wishes of God.
       (b) Condom vending machines make it easier to have sex.
       (c) God does not support safe sex.
       (d) God wishes that sex should occur only within marriages.
       (e) God wishes for a culture of promiscuity that is chaste.

3) When asked her position on “work for the dole”, Samantha proclaimed “You can’t just have people get money for nothing. The honourable thing to do is to work for your money.”
(i) Would Samantha (a) support “work for the dole”
(b) oppose “work for the dole”
(c) be undecided

(ii) Which of the following items most accurately represents Samantha’s reason?

(a) There is no dishonour in working for the dole.
(b) There is no dishonour in receiving the dole.
(c) People should be required to work for their money.
(d) There is no dishonour in working or not working for the dole.
(e) People should be required to work.

4) When asked his position on “work for the dole”, Bao affirmed “It does a society no good if people just freeload off it. By all means society should support the unemployed but they should realise that they also have a moral obligation to support society as well.”

(i) Would Bao (a) support “work for the dole”
(b) oppose “work for the dole”
(c) be undecided

(ii) Which of the following items most accurately represents Bao’s reason?

(a) The relationship between society and the unemployed is a two way street.
(b) People have a moral obligation to freeload support off society.
(c) Society should support the unemployed.
(d) Society should be supported by the unemployed.
(e) The support of an individual by a society is one of the most fundamental rights and thus should not be jeopardised by freeloaders.

5) When asked her position on multiculturalism, Susan replied “You need to respect that when you’re coming to a country, to some extent, you’re adopting their way of life. Good newly arrived citizens learn to adjust to the ways of their new country.”

(i) Would Susan (a) support multiculturalism
(b) oppose multiculturalism
(c) be undecided

(ii) Which of the following items most accurately represents Susan’s reason?

(a) Adopting a new way of life is too difficult for migrants.
(b) Multiculturalism discriminates against newly arrived migrants.
(c) The proper way for a migrant to act is to assimilate into the culture they are joining.
(d) Adopting the way of life is what newly arrived citizens do in their new country.
(e) Newly arrived citizens should retain their old way of life.

6) When asked his position on multiculturalism, Anthony stated “I think inevitably cultures that are different clash when together. Social disharmony results which, in turn, leads to social problems. Such problems are caused by culture clashes rather than cultures per se.”

(i) Would Anthony
   (a) support multiculturalism
   (b) oppose multiculturalism
   (c) be undecided

(ii) Which of the following items most accurately represents Anthony’s reason?

   (a) Culture leads to social disharmony which leads to social problems.
   (b) Multiple cultures within a society create social problems for each other which lead to negative consequences for that society.
   (c) Multiple cultures within a society will clash leading to negative consequences for that society.
   (d) Multiple cultures lead to negative consequences.
   (e) Multiple cultures lead to all of society clashing creating social problems.

7) When asked her position on free university education, Helena remarked “There are economic authorities who say that such an approach would lead to great economic cost and waste. There are other economists who say that this the investment would reap a very handsome return for Australia. I leave the decision to them - where it belongs.”

(i) Would Helena
   (a) support free university education
   (b) oppose free university education
   (c) be undecided

(ii) Which of the following items most accurately represents Helena’s reason?

   (a) The issue is who benefits from free university education.
   (b) Free university education may or may not produce a benefit for Australia
   (c) The relevant economic luminaries are split on the effects on free university education.
   (d) The relevant economic luminaries are split on the issue.
   (e) The decision is best left to the economists and they are undecided.

8) When asked his position on abortion, Si-Bin declared “We’ve been through this issue before. The courts decided that human life doesn’t really begin until birth. That’s the final word here.”
(i) Would Si-Bin (a) support abortion  
(b) oppose abortion  
(c) be undecided

(ii) Which of the following items most accurately represents Si-Bin’s reason?

(a) Human life doesn’t begin until birth.  
(b) The courts decide what is right or wrong and prior court rulings support abortion.  
(c) Only by determining when life begins can the courts determine whether or not abortion is moral.  
(d) Prior court rulings have determined that abortion is legal.  
(e) Prior court rulings have determined that abortion does not result in the loss of human life.

9) When asked his position on free university education, Paul declared “Education should be easily accessible for all - that’s a basic principle of fairness and decency but we need to ensure that it is valued. Sometimes people don’t value what they don’t pay for. It’s a difficult decision.”

(i) Would Paul (a) support free university education  
(b) oppose free university education  
(c) be undecided

(ii) Which of the following items most accurately represents Paul’s reason?

(a) Education has intrinsic value but only if its worth is recognised  
(b) Ideally education would be available for everyone and people would value it but it is not clear that free education would achieve this.  
(c) Ideally education would be free for everyone and this might ensure that it was valued.  
(d) Education has intrinsic value but is often undervalued by its recipients.  
(e) It is difficult to get people to value education because, regardless of whether education is free or not, people may not appreciate what education can do for them.
Section 2 Verbal Instructions
(to be presented with following overhead)

Section 2 contains items in the same format to the item on the overhead. Please read the first part of the question.
You will notice that it is in the same format as the first part of the questions in section 1. You answer it in identical fashion.

Please read the second part of the question.
Here you would circle (d) as it talks about age instead of relative form unlike the original statement. The other four items rephrase the original statement. Remember you are now doing the reverse of section 1 – you are trying to identify the most inaccurate rephrasing.
Section 2 Overhead

When asked to explain his position on whether a great soccer player, who is past his prime, should play in a national team, Anon said “I think you have to field the best team on the day. What happened in the past is in the past. The player isn't good enough anymore.”

(i) Would Anon
(a) support the player playing in the team
(b) oppose the player playing in the team
(c) be undecided

(ii) Which of the following items least accurately represents Anon’s reason?
(a) Only the best players should play and the player is not one of them.
(b) The player’s current form is not good enough compared with the players around him.
(c) The player is not playing well enough to earn his place in the national side.
(d) The player is too old a player for the national side.
(e) Too many other soccer players are playing better than the soccer player in question.
Section 2 Questions

1) When asked his position on capital punishment, Tiendat commented “What kind of people would we be if we just killed them. Wouldn’t it be just stooping to their level? Lock them up but good people never kill regardless of the reason.”

(i) Would Tiendat
(a) support capital punishment
(b) oppose capital punishment
(c) be undecided

(ii) Which of the following items least accurately represents Tiendat’s reason?
(a) Killing murderers is hypocritical.
(b) Killing murderers is itself murder.
(c) Capital punishment is committing the very crime it is trying to stop.
(d) Capital punishment is done solely to commit murder.
(e) Committing capital punishment is acting like a criminal.

2) When asked her opinion on condom vending machines, Irina said “What’s wrong with them? Sex is legal. Condom use is legal - even encouraged. That’s the main point of the issue.”

(i) Would Irina
(a) support condom vending machines
(b) oppose condom vending machines
(c) be undecided

(ii) Which of the following items least accurately represents Irina’s reason?
(a) The acts encouraged by condom vending machines are legal.
(b) The behaviour caused by condom vending machines is not unlawful.
(c) Condom vending machines do not promote acts which lawfully are immoral.
(d) Condom vending machines do not promote behaviour that fails to conform to society’s legal standards.
(e) Condom vending machines do not promote acts that violate the law.

3) When asked his position on abortion, Craig revealed “You need to think about this in terms of appropriateness. What is the appropriate thing for a good person to do? Would a good mother want to kill her unborn child? On the other hand, would a good mother really want to bring a child into this world that she could not cope with?”

(i) Would Craig
(a) support abortion
(b) oppose abortion
(c) be undecided
(ii) Which of the following items least accurately represents Craig’s reason?

(a) We have to determine what is the correct way to act in each situation.
(b) A mother’s appropriateness is the primary concern.
(c) The appropriateness of each possible action should be ascertained.
(d) The role of a good mother in these situations is the key factor.
(e) The responsibilities of a good mother may be unclear in this situation.

4) When asked her position on abortion, Narmatha disclosed “Our aim should be to ensure the greatest happiness for the greatest number of people. Abortion has both positive and negative consequences depending on who you are and we need to figure out whether the positives outweigh the negatives or the negatives outweigh the positives.”

(i) Would Narmatha (a) support abortion
(b) oppose abortion
(c) be undecided

(ii) Which of the following items least accurately represents Narmatha’s reason?

(a) We need to ensure that the positive consequences of abortion are seen as more prominent than the negative consequences.
(b) We need to compare the pros and cons of abortion.
(c) We need to see whether the pros of abortion outweigh the cons of abortion.
(d) We need to ensure that our position on abortion produces the best outcome for the most people.
(e) We need to ensure that overall happiness is maximised by abortion.

5) When asked his position on “work for the dole”, Zavic declared “I believe in the old rule ‘do unto others as they would do unto you’. If I was without a job, I wouldn’t want to have to grovel to the government to be able to feed myself.”

(i) Would Zavic (a) support “work for the dole”
(b) oppose “work for the dole”
(c) be undecided

(ii) Which of the following items least accurately represents Zavic’s reason?

(a) “Work for the dole” does not treat people in an appropriate manner and I wouldn’t want to be treated in an inappropriate manner.
(b) You could only support “work for the dole” if you would be willing to abide by the conditions of the policy and thought that this was reasonable.
(c) “Work for the dole” treats dole recipients in a way which non dole recipients wouldn’t want to be treated.
(d) The government has to meet the basic need of all its constituents to be treated appropriately.
(e) The issue is whether people treat others in the same way that they would want to be treated.

6) When asked her position on multiculturalism, Sukran declared “There is a great deal of wisdom in many cultures and therefore attempts to assimilate cultures into the dominant culture of a country run the risk of destroying sources of wisdom that may aid that country.”

(i) Would Sukran (a) support multiculturalism  
(b) oppose multiculturalism  
(c) be undecided

(ii) Which of the following items least accurately represents Sukran’s reason?

(a) Only through multiculturalism are we able to ensure that our society is sufficiently wise.  
(b) Multiculturalism allows the preservation of cultures that have wisdom to contribute.  
(c) Multiculturalism may, in the long run, aid our society.  
(d) Only through multiculturalism can we ensure that our society does not lose sources of wisdom that other cultures may provide.  
(e) Multiculturalism is excellent for ensuring that the wisdom that other cultures provide does not get destroyed.

7) When asked his position on free university education, Ian stated “It is not fair that people should have to pay for the tools which let them function in the modern world.”

(i) Would Ian (a) support free university education  
(b) oppose free university education  
(c) be undecided

(ii) Which of the following items least accurately represents Ian’s reason?

(a) Decency demands that you provide people with the skills and knowledge that they need to survive  
(b) You cannot reasonably expect people enter a world in which they cannot function.  
(c) Education provides important tools for individuals living in the modern world and, hence, it would be unfair to people who didn’t go to uni if fees were charged.  
(d) University provides the tools which enable people to survive in the modern world.  
(e) Without university, people will have trouble functioning in the modern world.
8) When asked his position on capital punishment, Zhao revealed “What kind of society is it that condones murder. How we treat criminals filters through to how we treat everyone. While there may seem to be a short term gain for society in killing its wickedest offenders, in the long term society as a whole will pay.”

(i) Would Zhao
(a) support capital punishment
(b) oppose capital punishment
(c) be undecided

(ii) Which of the following items least accurately represents Zhao’s reason?
(a) Capital punishment will result in people treating each other worse.
(b) Capital punishment will produce negative consequences because the death will ultimately filter through to society.
(c) Capital punishment will ultimately have negative consequences for society.
(d) Capital punishment will result in people treating each other worse and this will ultimately produce negative consequences.
(e) Capital punishment will ultimately produce negative consequences because the type of treatment typified by capital punishment will become more common in our society.

9) When asked her position on “work for the dole”, Justina commented “We need to determine what the attitudes of people on the dole are. Are they trying to dodge work, tax and the like? If they are attempting to fulfil their responsibilities to society then “work for the dole” probably is not necessary. However, if they are just trying to dodge their economic commitments then we should be able to extract some productivity from them.”

(i) Would Justina
(a) support “work for the dole”
(b) oppose “work for the dole”
(c) be undecided

(ii) Which of the following items least accurately represents Justina’s reason?
(a) We need to determine why people are on the dole.
(b) It depends on whether dole recipients are bludging off society or just unlucky members of it.
(c) “Work for the dole” should only be implemented if people are on the dole because they wish to dodge their economic commitments.
(d) “Work for the dole” should not be implemented if people are on the dole through no fault of their own.
(e) It depends on society’s economic commitment to the individual.
Section 3 Verbal Instructions
(to be presented with following overhead)

Section 3 contains items in the same format to the item on the overhead. Please read the first part of the question.

You will notice that it is in the same format as the first part of the questions in sections 1 and 2. You answer it in identical fashion.

Please read the second part of the question.

When answering the second part of questions in section 3, you first need to extract the “core idea” behind a person’s reason. In the case of the soccer player, the issue was one of only the best being able to participate – the soccer player wasn’t good enough for the national team.

Applying this to running a company, we would get that only the best executives should run a company. Thus, the answer is (b) as it expresses this principle as applied to running a company. Remember, once again, it does not matter whether you agree or disagree with the statements and please do not justify your answer.
Section 3 Overhead

When asked to explain his position on whether a great soccer player, who is past his prime, should play in a national team, Anon said “I think you have to field the best team on the day. What happened in the past is in the past. The player isn't good enough anymore.”

(i) Would Anon
   (a) support the player playing in the team
   (b) oppose the player playing in the team
   (c) be undecided

(ii) Applying logic parallel to that expressed in this case, which of the following reasons for his position, on whether an executive who was extremely successful but now is a relatively poor performer should run a company, would Anon be most likely to express?

   (a) Old executives must make way for new up and coming executives.
   (b) Only those who can properly contribute to the success of a company should run it.
   (c) The executive has contributed greatly to the company so the company owes him.
   (d) Seniority is not a good basis for promotions.
   (e) Business never gives a second chance.
Section 3 Questions

1) When asked her position on capital punishment, Simone replied “We have too many people committing terrible crimes and gaol or any other punishment doesn’t seem to stop them. We need to give criminals something to consider and police, judges etc. true powers of enforcement.”

(i) Would Simone
(a) support capital punishment
(b) oppose capital punishment
(c) be undecided

(ii) Applying logic parallel to that expressed in this case, which of the following reasons for her position on “work for the dole” would Simone be most likely to express?

(a) People who don’t “work for the dole” are lawbreakers and should be dealt with accordingly.
(b) Unfortunately, the more we allow people to bludge off the dole, the more they will do so.
(c) If we allow people to bludge off the dole, then we will be encouraging criminal actions.
(d) We need to give the government power to enforce “work for the dole”.
(e) We should punish people who bludge off the dole.

2) When asked his position on condom vending machines, Richard commented “We want to get people acting in a responsible manner, doing the right thing. The question is do condom vending machines merely encourage safe sex which is a responsible way to act or do they also encourage irresponsibly widespread sex. Which type of behaviour is produced more is what is important.”

(i) Would Richard
(a) support condom vending machines
(b) oppose condom vending machines
(c) be undecided

(ii) Applying logic parallel to that expressed in this case, which of the following reasons for his position on free university education would Richard be most likely to express?

(a) Free university is a responsible thing for a society to do.
(b) Attending university is a responsibility for people to meet.
(c) Free university will result in more responsible people.
(d) It is the government’s responsibility to ensure that education be freely available.
(e) The responsible thing for an individual to do is to attend university.
3) When asked her position on “work for the dole”, Louise said “You can’t just force people to do something. It’s ok to ask people to do things like work for welfare but one doesn’t force people to work against their will. It just isn’t right.”

   (i) Would Louise
       (a) support “work for the dole”
       (b) oppose “work for the dole”
       (c) be undecided

   (ii) Applying logic parallel to that expressed in this case, which of the following reasons for her position on abortion would Louise be most likely to express?

       (a) It is wrong to attempt to stop someone from having an abortion.
       (b) We shouldn't be forcing women to think about abortion.
       (c) Abortion is forcing people to work against their will.
       (d) Abortion is forcing someone to commit murder.
       (e) While you may want to suggest alternatives other than abortion, you can't just force woman to go through with a pregnancy.

4) When asked his position on free university education, Brian declared “You have to realise that, while you have certain rights in how society should treat you, society has the right to expect certain things from you. Education is a provision that society makes available to you so you can help yourself but that doesn’t mean that you should neglect helping society. Requiring people to pay for their education ensures that not only do you benefit from education but so do all the other members of society.”

   (i) Would Brian
       (a) support free university education
       (b) oppose free university education
       (c) be undecided

   (ii) Applying logic parallel to that expressed in this case, which of the following reasons for his position on condom vending machines would Brian be most likely to express?

       (a) Condom vending machines are a way of ensuring that you repay what you owe society.
       (b) Condom vending machines are a provision that society makes to help you.
       (c) Condom vending machines are something you have a right to.
       (d) Condom vending machines protect the health of everyone.
       (e) Requiring people to pay for condoms ensures that society benefits from their usage.

5) When asked her position on abortion, Natalya indicated “Focus on the mother here. If she wants an abortion then obviously she is suffering from her pregnancy. To force her to continue would be very cruel. Being cruel to people isn’t right.”
(i) Would Natalya (a) support abortion  
(b) oppose abortion  
(c) be undecided

(ii) Applying logic parallel to that expressed in this case, which of the following reasons for her position on multiculturalism would Natalya be most likely to express?

(a) Forcing people to abandon their cultural beliefs is spiteful.  
(b) Multiculturalism is a cruel policy.  
(c) Multiculturalism causes people to suffer.  
(d) Multiculturalism prevents people from suffering.  
(e) Multiculturalism is about forcing people to abandon their cultural beliefs.

6) When asked her position on abortion, Rachel proclaimed “All humans start as foetuses. So aborting a foetus is ending human life prematurely. Ending a human life prematurely is usually highly illegal – we call it murder. Hence, abortion should be illegal.”

(i) Would Rachel (a) support abortion  
(b) oppose abortion  
(c) be undecided

(ii) Applying logic parallel to that expressed in this case, which of the following reasons for her position on condom vending machines would Rachel be most likely to express?

(a) Condom vending machines do not cause any illegal acts.  
(b) Condom vending machines prevent reproduction.  
(c) Condom vending machines are legal.  
(d) Condom vending machines cause the death of infants  
(e) Condom vending machines prevent the spread of disease.

7) When asked his position on multiculturalism, Jonathon proclaimed “Respect for our laws are important here. To function properly, a society needs respect of its legal system. If I knew that peoples of all culture would accept our laws then I would support multiculturalism but the jury is still out here.”

(i) Would Jonathon (a) support multiculturalism  
(b) oppose multiculturalism  
(c) be undecided

(ii) Applying logic parallel to that expressed in this case, which of the following reasons for his position on abortion would Jonathon be most likely to express?
(a) We need to evaluate whether abortion will aid our society or not.
(b) While abortion is not illegal, it nevertheless encourages disrespect for others.
(c) The reactions of people from different cultures is important.
(d) The jury is still out over whether abortion has any role in the legal system.
(e) Performing abortion does not entail any legal violations.

8) When asked about her position on condom vending machines, Linh indicated “I think we need to take a broad perspective here. What will it do to our society? Will the health benefits outweigh the social cost?”

(i) Would Linh
   (a) support condom vending machines
   (b) oppose condom vending machines
   (c) be undecided

(ii) Applying logic parallel to that expressed in this case, which of the following reasons for her position on “work for the dole” would Linh be most likely to express?

   (a) We need to examine the health effects of “work for the dole”.
   (b) We need to examine the economic benefits of “work for the dole”.
   (c) We need to examine what people on “work for the dole” feel about the scheme.
   (d) It is difficult to determine what “work for the dole” will do to our society.
   (e) Combining economic and social factors, “work for the dole” will likely produce a positive outcome for our society.

9) When asked her position on free university education, Carla affirmed “People have the right to develop themselves as far as they can. Financial considerations such as fees prevent many people from exercising such rights.”

(i) Would Carla
   (a) support free university education
   (b) oppose free university education
   (c) be undecided

(ii) Applying logic parallel to that expressed in this case, which of the following reasons for her position on capital punishment would Carla be most likely to express?

   (a) It would be nice if we gave people a second chance in such situations. They deserve it.
   (b) We have to try and allow both the right to see the guilty punished and the right to a second chance to be exercised.
   (c) We need to know what rights a guilty person has.
(d) If capital punishment is a right then we need to know which members of society have the responsibility to exercise this right.
(e) We have to examine financial considerations when evaluating capital punishment.
Section 4 Instructions
(to be presented with following overhead)

Section 4 contains items in the same format to the item on the overhead. Please read the first part of the question.

You will notice that it is in the same format as the first part of the questions in sections 1, 2 and 3. You answer it in identical fashion.

Please read the second part of the question.

When answering the second part of questions in section 4, you first need to extract the “core idea” behind a person’s reason (as you did in section 3). In the case of the soccer player, the issue was one of only the best being able to participate – the soccer player wasn’t good enough for the national team.

Applying this to politics, we get that only the most competent or good politicians should reach high office.

(a) expresses this opinion directly as does (d). In the case of (d) competence means competence for the position in question.

(b) uses the principle by claiming the politician lacks competence. We are still using the principle but there has been an added assumption that the person is incompetent. Note however that the principle is still being applied so this is a correct application of the principle.

(c) is the reverse of (b). We are using the principle but we are adding that the politician is competent. For these questions no one is asking you to determine facts such as whether or not the politician is competent. The only feature for you to attend to is whether or not the principle has been somehow applied.

In this case, (e) would be the correct answer because it applies a different principle. Remember you are trying to find the cases where the principle has been applied most inaccurately – applying a different principle fits this category.
When asked to explain his position on whether a great soccer player, who is past his prime, should play in a national team, Anon said “I think you have to field the best team on the day. What happened in the past is in the past. The player isn't good enough anymore.”

(i) Would Anon
(a) support the player playing in the team
(b) oppose the player playing in the team
(c) be undecided

(ii) Applying logic parallel to that expressed in this case, which of the following reasons for his position, on whether a controversial politician should be awarded a higher office would Anon be most likely not to express?

(a) If the politician is good enough for the relevant position then he should be promoted.
(b) One cannot be competent enough for high public office if one generates a great deal of controversy.
(c) Obviously to generate such publicity, the politician must be good at devising novel solutions to political problems.
(d) The issue is whether or not the politician is a good choice for the position.
(e) One should endeavour to have a political administration as untainted as possible.
Section 4 Questions

1) When asked his position on capital punishment, Ray affirmed “An eye for an eye. Murderers and the like are the scum of society. Why should we care for them? What good are they going to do anyone alive? Treat them with the same brutality that they treat others.”

(i) Would Ray
(a) support capital punishment
(b) oppose capital punishment
(c) be undecided

(ii) Applying logic parallel to that expressed in this case, which of the following reasons for his position on "work for the dole" would Ray be most likely not to express?

(a) People on the dole are using society for money so we should use them for labour.
(b) People on the dole are unfortunate and so deserve support not censure.
(c) If people are on the dole and trying to find work, we should help them. If they are bludging then we should punish them.
(d) People on the dole should be treated no differently whether they are bludging or genuinely in need.
(e) People on the dole are looking for work so we should provide them with a job.

2) When asked her position on free university education, Sarah commented “If we were to introduce free education, people would inevitably abuse it. We would be having lots of students who would just bludge around.”

(i) Would Sarah
(a) support free university education
(b) oppose free university education
(c) be undecided

(ii) Applying logic parallel to that expressed in this case, which of the following reasons for her position on multiculturalism would Sarah be most likely not to express?

(a) There are many people who would use multiculturalism as an excuse not to properly become part of a society.
(b) There are many people who would abuse the principle of multiculturalism by not accepting other cultures but demanding that others accept their culture.
(c) There are many people who would use multiculturalism as a means to further private goals such as getting elected.
(d) There are many people who would use multiculturalism in the manner intended ignoring all the long-term consequences.
(e) There are many people who would abuse the principle of multiculturalism to claim that there is nothing wrong with any feature of their culture.

3) When asked her position on abortion, Amy indicated “I believe that life begins at conception and the right to life with it. I do not see how the so called woman’s right to choose can possibly override this most basic of rights.”

   (i) Would **Amy**
       (a) support abortion
       (b) oppose abortion
       (c) be undecided

   (ii) Applying logic parallel to that expressed in this case, which of the following reasons for her position on free university education would **Amy** be most likely **not** to express?

       (a) People should be entitled to obtain an education if they want to.
       (b) The issue here is whether society has the right to interfere with its own workings such as the provision of education.
       (c) Ideas such as user pays should not be able to override the right that people should have to develop themselves.
       (d) The people in a democracy have the right to determine who and what they fund and this collective right can override certain individual rights.
       (e) There is a conflict here between people to having an entitlement to access a valuable resource like education and the implied right of other people not to be financially responsible for other people’s expenditure.

4) When asked his position on multiculturalism, Roger proclaimed “It’s similar to the idea of hospitality. Both the host and the guest should be careful not to inadvertently offend the other. Will a country with one culture and an immigrant with another manage to offend each other? Tough question to answer.”

   (i) Would **Roger**
       (a) support multiculturalism
       (b) oppose multiculturalism
       (c) be undecided

   (ii) Applying logic parallel to that expressed in this case, which of the following reasons for his position on free university education would **Roger** be most likely **not** to express?

       (a) Society has a responsibility to treat you a certain way but you have to reciprocate this.
(b) While people should expect society to take care of their educational needs, society should expect people not to abuse the privilege of education.
(c) The delivery of education to people and the subsequent usage of education both require a certain standard of behaviour to be observed.
(d) The issue here is that society doesn’t offend would-be students and they don’t offend society.
(e) Education has to be both delivered and utilised appropriately.

5) When asked her position on multiculturalism, Vicky asserted “As a country in the UN, Australia has certain legal responsibilities that it has to live up to due to the signing of various treaties, conventions and other pieces of international law. These include tolerance of and non-discrimination towards people of different cultures.”

(i) Would Vicky
   (a) support multiculturalism
   (b) oppose multiculturalism
   (c) be undecided

(ii) Applying logic parallel to that expressed in this case, which of the following reasons for her position on condom vending machines would Vicky be most likely not to express?

   (a) There are issues of international law that Australia has to obey.
   (b) Australia’s international commitments include the respecting of other cultures.
   (c) Australia’s international responsibilities dictates that multiculturalism must be employed.
   (d) Multiculturalism is implied by Australia’s involvement in the UN and related activities.
   (e) The international community will punish Australia if it fails to pursue multiculturalism.

6) When asked her position on “work for the dole”, Zewlan remarked “What is this doing to our society and the people in it? Is it making us more productive, helping the unemployed get jobs and so on? Or is it just punishing the unemployed? No one without a soap box to stand on has attempted to analyse this.”

(i) Would Zewlan
   (a) support free university education
   (b) oppose free university education
   (c) be undecided

(ii) Applying logic parallel to that expressed in this case, which of the following reasons for her position on capital punishment would Zewlan be most likely not to express?
(a) The retributive nature of capital punishment has not yet been shown to either deter or not deter crime.
(b) Capital punishment applies a retributive approach to criminals which clearly does not help them get rehabilitated.
(c) We need a detailed analysis on the effect of capital punishment on society.
(d) Since capital punishment does deter criminals from committing serious crime we should implement it.
(e) As there is no community advantage from capital punishment we should not implement it.

7) When asked his position on capital punishment, John remarked “People have different opinions on this one. I mean it’s outlawed and priests and other moral figures speak out against it but still too much crime leads to a breakdown in order.”

(i) Would John
(a) support capital punishment
(b) oppose capital punishment
(c) be undecided

(ii) Applying logic parallel to that expressed in this case, which of the following reasons for his position on abortion would John be most likely not to express?

(a) There is a split amongst the clergy on whether abortion should be supported or not.
(b) While some moral leaders say it is acceptable, one has to wonder whether the attitude of indifference towards the unborn would carry through to other vulnerable members of society.
(c) While there are people both for and against it. I think the key is to focus on the overall effects of society on each individual.
(d) Most moral figures support it despite having misgivings and I take my lead from them although I understand their reservations.
(e) The issues are those of order and moral authority.

8) When asked her position on “work for the dole”, Jasmine declared “The issue is here is one of overall consequences. If “work for the dole” really does foster links between employers and employees and give self-esteem boosts to the unemployed, I’m all for it. However, if its net effect is to alienate an already marginalised group of society then I can’t support it.”

(i) Would Jasmine
(a) support “work for the dole”
(b) oppose “work for the dole”
(c) be undecided
(ii) Applying logic parallel to that expressed in this case, which of the following reasons for her position on capital punishment would Jasmine be most likely not to express?

(a) Capital punishment is likely to reduce overall crime so we should support it.
(b) Capital punishment is unlikely to reduce overall crime so we should not support it.
(c) We need to examine the effects on capital punishment on our society.
(d) If capital punishment marginalises its victims then we shouldn’t support it.
(e) The issue is whether capital punishment produces primarily positive or negative effects.

9) When asked her position on condom vending machines, Nancy disclosed “We need to look at the message we are sending. Condom machines make it easier to engage in widespread sex. This is not the way decent folk live.”

(i) Would Nancy (a) support condom vending machines
(b) oppose condom vending machines
(c) be undecided

(ii) Applying logic parallel to that expressed in this case, which of the following reasons for her position on multiculturalism would Nancy be most likely not to express?

(a) The issue is whether or not new migrants make life easier.
(b) It depends on what the appropriate behaviour for new migrants is.
(c) Decent people give newcomers the message that they are welcome.
(d) Decent people try not to offend their host.
(e) We need to ensure that migrants and prior residents treat each other with respect.
C.6  Details of Item Removal From Temporary MCQ

As discussed in the Results section of Chapter 6, because the Temporary MCQ Score demonstrated good reliability, when shortening the measure to produce the Final MCQ Score, those items that were deleted were those items that weighted heavily on verbal comprehension at the expense of moral reasoning. This was accomplished by determining the partial correlation of each MCQ item and p scores with verbal comprehension controlled for.

For each of the sections, one stage 3, one stage 4 and one stage 5 item were deleted. This was done to ensure that the proportion of stage 3 to stage 4 to stage 5 items was maintained because this had been a key test design factor (see Section 6.3). For a given section and stage, the item deleted was the item in that section from that stage with the lowest (i.e., least positive) correlation.

Thus, for instance, from section 1 of the Temporary MCQ, the stage 3 item with the least positive correlation amongst all section 1 stage 3 items, the stage 4 items with the least positive correlation amongst all section 1 stage 4 items and the stage 5 item with the least positive correlation amongst all stage 5 scores were deleted to form the Final MCQ.
Appendix D

Study 4 Methodological Details

D.1 Purging of Participants

As discussed in the Method section of Chapter 7, 5 participants were purged from the Study 4 sample due to failing the DIT reliability checks recommended by Rest et al. (1999c). These reliability tests were described in Appendix Section A.3.

One participant was purged because he/she produced a RtXRK score of 217. Two additional participants were purged because each of them was non-discriminating on 2 dilemmas. The other two participants were purged because of multiple reasons. One of them produced a RtXRk score of 720, omitted all 24 ranks and was non-discriminating on all 6 dilemmas whilst the other produced a RtXRK score of 720, omitted all 72 ratings and was non-discriminating on all 6 dilemmas.

D.2 Defining Issues Test

The DIT was employed in Study 4 to measure moral reasoning. Because of the DIT was presented in Appendix Section A.2, it will not be presented here.

D.3 Political Questionnaire

This is the questionnaire that was used to measure liberalism-conservatism in Study 4.
Please circle your gender  Male  Female

Please give your age in years at your last birthday ___

For the following items, indicate to what extent you believe in or favour them.

Use the following scale:  1=strongly oppose;  
                        2=oppose;  
                        3=neither support nor oppose;  
                        4=support;  
                        5=strongly support.

1) Death penalty ___
2) Stiffer gaol terms ___
3) Environmental protection ___
4) Voluntary euthanasia ___
5) Unions ___
6) Religious authority ___
7) Gay rights ___
8) Pre-marital virginity ___
9) Government Welfare ___
10) Work For the Dole ___
11) Increased immigration ___
12) Legalised abortion ___
13) War-time Conscription ___
14) Condom vending machines ___
15) Legalised prostitution ___
16) Unemployment Benefits ___
17) A large military ___
18) Socialism ___
19) Truth of at least one religious text (e.g., Bible, Koran) ___
20) Strikes ___
21) Multiculturalism ___
22) Picketing ___
23) Asian immigration ___
24) Native title ___
25) Australia as a monarchy ___
26) Decriminalised marijuana ___
27) Mandatory sentencing ___
28) Availability of fertility treatment for lesbians ___
Which one of the following parties are you most likely to vote for at the next election? Please circle one.

(a) Labor
(b) Green
(c) National
(d) One Nation
(e) Liberal
(f) Democrat

For the following political parties, circle “yes” if you would consider voting for them. Otherwise circle “no”.

(a) Democrat  Yes  No
(b) National  Yes  No
(c) Liberal  Yes  No
(d) Labor  Yes  No
(e) One Nation  Yes  No
(f) Green  Yes  No
For the following questions, be aware of the following distinction.

**Left wing** refers to a collection of political principles such as collective ownership of property, business and industry, higher taxes, increased welfare and an open approach to things such as morality and culture. A very extreme example of left wing viewpoints is provided by the policies adopted by the communists who ruled the U.S.S.R. and Eastern Europe just after World War II.

**Right wing** refers to a collection of political beliefs such as traditional opinions on things such as morality and culture, low taxes, lower welfare and private ownership of property, industry and business. A very extreme example of right wing viewpoints is provided by the policies adopted by the fascist movements in Japan, Italy and Germany around the time of World War II.

**Rank** (i.e., order) the following political views of the following parties from 1 (most left wing) to 6 (most right wing).

(a) Liberal __
(b) National __
(c) One Nation __
(d) Labor __
(e) Green __
(f) Democrat __

On a scale of 0 (very left wing) to 10 (very right wing), how would you classify your political opinions? __
D.4 Moral Comprehension Questionnaire

This questionnaire (the MCQ) is the instrument that was used to assess moral comprehension in Study 4. Note that participants were shown an overhead together with verbal instructions before answering each section. This are respectively labelled “overhead” (e.g., “Section 1 Overhead”) and “verbal instructions” (e.g., “Section 1 Verbal Instructions”). What the participants actually received is labelled “questions” (e.g., “Section 1 Questions”).
Initial Verbal Instructions

In a moment, you will be asked to complete a questionnaire divided into four sections – one at a time. There will be separate instructions for each but here is some initial information that applies to all four sections.

In previous research, we asked first year psychology students such as yourself to express whether they supported, opposed or were neutral to a given political policy. We also asked them to explain why they took that position. Each questionnaire presents several of these explanations although we have changed the names of the students to protect their anonymity.

We are interested in examining your understanding of these statements.

We noticed that several of the students seemed confused about the definitions of “multiculturalism” and “work for the dole”. The following overhead provides definitions of these policies.
Definitions Overhead

Multiculturalism – “A policy where migrants to a country are encouraged to practice the culture of their prior homeland.” This is distinct to the policy of “assimilation” where migrants are encouraged to adopt the culture of their new homeland (although both policies encourage immigration from a diverse range of cultural backgrounds).

Work for the Dole – “A policy that requires recipients of unemployment benefits (i.e., “dole”, “welfare”) to work for those benefits as opposed to receiving them unconditionally.”
Section 1 Verbal Instructions
(to be presented with following overhead)

Section 1 contains items in the same format to the item on the overhead. Please read the first part of the question.

For the first part of the question, you would circle (b) as it is the correct answer. Anon says that current form is most important (“You have to field the best team on the day”) and that the player doesn’t have it (“The player isn’t good enough anymore.”).

Note that we are not interested whether you think these statements are true or not or whether you think the player should or shouldn’t be included. We just want you to indicate what Anon’s reasoning says about his or her position on the issue.

Please read the second part of the question.
For the second part of the question, you would circle (c) as it is the correct answer.

(a) is wrong because Anon makes no such claims.
(b) is wrong because Anon mentions form not age.
(c) is correct as it appears to rephrase the argument.
(d) is wrong because it is incomplete. Anon does say this but this only justifies his position when combined with the fact that you have to choose the best team.
(e) is wrong because it is incomplete. Anon does say this but this only justifies his position when combined with the fact that the player is not playing well.

For all the questions, please circle which answer you feel is correct and do not justify you answer. Remember that we are not interested in your opinions on these issues but in your understanding of other’s positions.
Section 1 Overhead

When asked to explain his position on whether a great soccer player, who is past his prime, should play in a national team, Anon said “I think you have to field the best team on the day. What happened in the past is in the past. The player isn't good enough anymore.”

(i) Would Anon
   (a) support the player playing in the team
   (b) oppose the player playing in the team
   (c) be undecided

(ii) Which of the following items most accurately represents Anon’s reason?

   (a) We should give special treatment to veteran sports stars.
   (b) When a player reaches a certain age, they should automatically be dropped from their national side.
   (c) Only the best players should play on the team and the player in question is no longer one of those players.
   (d) The player in question is no longer a good player.
   (e) You have to field the best team on the day.
Section 1 Questions

1) When asked to explain his position on capital punishment, Joe remarked “Both criminals and their victims have rights. We need to examine whether depriving crooks of their right to life is balanced by protecting the right of justice for any victim’s loved ones.”

   (i) Would Joe
   (a) support capital punishment
   (b) oppose capital punishment
   (c) be undecided

   (ii) Which of the following items most accurately represents Joe’s reason?

   (f) We all have rights and while crime victims have rights, the right to life of criminals is more important.
   (g) We all have rights and while criminals have rights, the rights of victims are more important.
   (h) We need to balance the interests of criminals and their victims.
   (i) We need to analyse how the rights of criminals and their victims are affected.
   (j) We need to examine the balanced rights of criminals and their victims and deprive and protect them.

2) When asked about his position on condom vending machines, Lee declared “While there’s nothing wrong with them per se, they encourage a culture of promiscuity. Such a culture is against God’s way of living. God dictates that we should be chaste except in marriage.”

   (i) Would Lee
   (a) support condom vending machines
   (b) oppose condom vending machines
   (c) be undecided

   (ii) Which of the following items most accurately represents Lee’s reason?

   (a) Condom vending machines lead to behaviour that is against the wishes of God.
   (b) Condom vending machines make it easier to have sex.
   (c) God does not support safe sex.
   (d) God wishes that sex should occur only within marriages.
   (e) God wishes for a culture of promiscuity that is chaste.

3) When asked her position on “work for the dole”, Samantha proclaimed “You can’t just have people get money for nothing. The honourable thing to do is to work for your money.”
(i) Would Samantha (a) support “work for the dole”  
(b) oppose “work for the dole”  
(c) be undecided

(ii) Which of the following items most accurately represents Samantha’s reason?

(a) There is no dishonour in working for the dole.  
(b) There is no dishonour in receiving the dole.  
(c) People should be required to work for their money.  
(d) There is no dishonour in working or not working for the dole.  
(e) People should be required to work.

4) When asked his position on “work for the dole”, Bao affirmed “It does a society no good if people just freeload off it. By all means society should support the unemployed but they should realise that they also have a moral obligation to support society as well.”

(i) Would Bao (a) support “work for the dole”  
(b) oppose “work for the dole”  
(c) be undecided

(ii) Which of the following items most accurately represents Bao’s reason?

(a) The relationship between society and the unemployed is a two way street.  
(b) People have a moral obligation to freeload support off society.  
(c) Society should support the unemployed.  
(d) Society should be supported by the unemployed.  
(e) The support of an individual by a society is one of the most fundamental rights and thus should not be jeopardised by freeloaders.

5) When asked her position on free university education, Helena remarked “There are economic authorities who say that such an approach would lead to great economic cost and waste. There are other economists who say that this the investment would reap a very handsome return for Australia. I leave the decision to them - where it belongs.”

(i) Would Helena (a) support free university education  
(b) oppose free university education  
(c) be undecided

(ii) Which of the following items most accurately represents Helena’s reason?

(a) The issue is who benefits from free university education.  
(b) Free university education may or may not produce a benefit for Australia  
(c) The relevant economic luminaries are split on the effects on free university education.
(d) The relevant economic luminaries are split on the issue.
(e) The decision is best left to the economists and they are undecided.

6) When asked his position on free university education, Paul declared “Education should be easily accessible for all - that’s a basic principle of fairness and decency but we need to ensure that it is valued. Sometimes people don’t value want they don’t pay for. It’s a difficult decision.”

(i) Would Paul
(a) support free university education
(b) oppose free university education
(c) be undecided

(ii) Which of the following items most accurately represents Paul’s reason?
(a) Education has intrinsic value but only if its worth is recognised
(b) Ideally education would be available for everyone and people would value it but it is not clear that free education would achieve this.
(c) Ideally education would be free for everyone and this might ensure that it was valued.
(d) Education has intrinsic value but is often undervalued by its recipients.
(e) It is difficult to get people to value education because, regardless of whether education is free or not, people may not appreciate what education can do for them.
Section 2 Verbal Instructions
(to be presented with following overhead)
Section 2 contains items in the same format to the item on the overhead. Please read the first part of the question.
You will notice that it is in the same format as the first part of the questions in section 1. You answer it in identical fashion.

Please read the second part of the question.
Here you would circle (d) as it talks about age instead of relative form unlike the original statement. The other four items rephrase the original statement. Remember you are now doing the reverse of section 1 – you are trying to identify the most inaccurate rephrasing.
Section 2 Overhead

When asked to explain his position on whether a great soccer player, who is past his prime, should play in a national team, Anon said “I think you have to field the best team on the day. What happened in the past is in the past. The player isn't good enough anymore.”

(i) Would Anon
(a) support the player playing in the team
(b) oppose the player playing in the team
(c) be undecided

(ii) Which of the following items least accurately represents Anon’s reason?
(a) Only the best players should play and the player is not one of them.
(b) The player’s current form is not good enough compared with the players around him.
(c) The player is not playing well enough to earn his place in the national side.
(d) The player is too old a player for the national side.
(e) Too many other soccer players are playing better than the soccer player in question.
Section 2 Questions

1) When asked her opinion on condom vending machines, Irina said “What’s wrong with them? Sex is legal. Condom use is legal - even encouraged. That’s the main point of the issue.”

   (i) Would Irina
       (a) support condom vending machines
       (b) oppose condom vending machines
       (c) be undecided

   (ii) Which of the following items least accurately represents Irina’s reason?

       (a) The acts encouraged by condom vending machines are legal.
       (b) The behaviour caused by condom vending machines is not unlawful.
       (c) Condom vending machines do not promote acts which lawfully are immoral.
       (d) Condom vending machines do not promote behaviour that fails to conform to society’s legal standards.
       (e) Condom vending machines do not promote acts that violate the law.

2) When asked his position on abortion, Craig revealed “You need to think about this in terms of appropriateness. What is the appropriate thing for a good person to do? Would a good mother want to kill her unborn child? On the other hand, would a good mother really want to bring a child into this world that she could not cope with?”

   (i) Would Craig
       (a) support abortion
       (b) oppose abortion
       (c) be undecided

   (ii) Which of the following items least accurately represents Craig’s reason?

       (a) We have to determine what is the correct way to act in each situation.
       (b) A mother’s appropriateness is the primary concern.
       (c) The appropriateness of each possible action should be ascertained.
       (d) The role of a good mother in these situations is the key factor.
       (e) The responsibilities of a good mother may be unclear in this situation.

3) When asked her position on abortion, Narmatha disclosed “Our aim should be to ensure the greatest happiness for the greatest number of people. Abortion has both positive and negative consequences depending on who you are and we need to figure out whether the positives outweigh the negatives or the negatives outweigh the positives.”

   (i) Would Narmatha
       (a) support abortion
       (b) oppose abortion
       (c) be undecided
(ii) Which of the following items least accurately represents Narmatha’s reason?

(a) We need to ensure that the positive consequences of abortion are seen as more prominent than the negative consequences.
(b) We need to compare the pros and cons of abortion.
(c) We need to see whether the pros of abortion outweigh the cons of abortion.
(d) We need to ensure that our position on abortion produces the best outcome for the most people.
(e) We need to ensure that overall happiness is maximised by abortion.

4) When asked her position on multiculturalism, Sukran declared “There is a great deal of wisdom in many cultures and therefore attempts to assimilate cultures into the dominant culture of a country run the risk of destroying sources of wisdom that may aid that country.”

(i) Would Sukran
(a) support multiculturalism
(b) oppose multiculturalism
(c) be undecided

(ii) Which of the following items least accurately represents Sukran’s reason?

(a) Only through multiculturalism are we able to ensure that our society is sufficiently wise.
(b) Multiculturalism allows the preservation of cultures that have wisdom to contribute.
(c) Multiculturalism may, in the long run, aid our society.
(d) Only through multiculturalism can we ensure that our society does not lose sources of wisdom that other cultures may provide.
(e) Multiculturalism is excellent for ensuring that the wisdom that other cultures provide does not get destroyed.

5) When asked his position on free university education, Ian stated “It is not fair that people should have to pay for the tools which let them function in the modern world.”

(i) Would Ian
(a) support free university education
(b) oppose free university education
(c) be undecided

(ii) Which of the following items least accurately represents Ian’s reason?

(a) Decency demands that you provide people with the skills and knowledge that they need to survive
(b) You cannot reasonably expect people enter a world in which they cannot function.
(c) Education provides important tools for individuals living in the modern world and, hence, it would be unfair to people who didn’t go to uni if fees were charged.
(d) University provides the tools which enable people to survive in the modern world.
(e) Without university, people will have trouble functioning in the modern world.

6) When asked her position on “work for the dole”, Justina commented “We need to determine what the attitudes of people on the dole are. Are they trying to dodge work, tax and the like? If they are attempting to fulfil their responsibilities to society then “work for the dole” probably is not necessary. However, if they are just trying to dodge their economic commitments then we should be able to extract some productivity from them.”

(i) Would Justina
   (a) support “work for the dole”
   (b) oppose “work for the dole”
   (c) be undecided

(ii) Which of the following items least accurately represents Justina’s reason?

   (a) We need to determine why people are on the dole.
   (b) It depends on whether dole recipients are bludging off society or just unlucky members of it.
   (c) “Work for the dole” should only be implemented if people are on the dole because they wish to dodge their economic commitments.
   (d) “Work for the dole” should not be implemented if people are on the dole through no fault of their own.
   (e) It depends on society’s economic commitment to the individual.
Section 3 Verbal Instructions
(to be presented with following overhead)

Section 3 contains items in the same format to the item on the overhead. Please read the first part of the question.

You will notice that it is in the same format as the first part of the questions in sections 1 and 2. You answer it in identical fashion.

Please read the second part of the question.

When answering the second part of questions in section 3, you first need to extract the “core idea” behind a person’s reason. In the case of the soccer player, the issue was one of only the best being able to participate – the soccer player wasn’t good enough for the national team.

Applying this to running a company, we would get that only the best executives should run a company. Thus, the answer is (b) as it expresses this principle as applied to running a company. Remember, once again, it does not matter whether you agree or disagree with the statements and please do not justify your answer.
Section 3 Overhead

When asked to explain his position on whether a great soccer player, who is past his prime, should play in a national team, Anon said “I think you have to field the best team on the day. What happened in the past is in the past. The player isn't good enough anymore.”

(i) Would Anon
(a) support the player playing in the team
(b) oppose the player playing in the team
(c) be undecided

(ii) Applying logic parallel to that expressed in this case, which of the following reasons for his position, on whether an executive who was extremely successful but now is a relatively poor performer should run a company, would Anon be most likely to express?

(a) Old executives must make way for new up and coming executives.
(b) Only those who can properly contribute to the success of a company should run it.
(c) The executive has contributed greatly to the company so the company owes him.
(d) Seniority is not a good basis for promotions.
(e) Business never gives a second chance.
Section 3 Questions

1) When asked his position on condom vending machines, Richard commented “We want to get people acting in a responsible manner, doing the right thing. The question is do condom vending machines merely encourage safe sex which is a responsible way to act or do they also encourage irresponsibly widespread sex. Which type of behaviour is produced more is what is important.”

(i) Would Richard (a) support condom vending machines (b) oppose condom vending machines (c) be undecided

(ii) Applying logic parallel to that expressed in this case, which of the following reasons for his position on free university education would Richard be most likely to express?

(a) Free university is a responsible thing for a society to do. 
(b) Attending university is a responsibility for people to meet. 
(c) Free university will result in more responsible people. 
(d) It is the government’s responsibility to ensure that education be freely available. 
(e) The responsible thing for an individual to do is to attend university.

2) When asked her position on “work for the dole”, Louise said “You can’t just force people to do something. It’s ok to ask people to do things like work for welfare but one doesn’t force people to work against their will. It just isn’t right.”

(i) Would Louise (a) support “work for the dole” (b) oppose “work for the dole” (c) be undecided

(ii) Applying logic parallel to that expressed in this case, which of the following reasons for her position on abortion would Louise be most likely to express?

(a) It is wrong to attempt to stop someone from having an abortion. 
(b) We shouldn't be forcing women to think about abortion. 
(c) Abortion is forcing people to work against their will. 
(d) Abortion is forcing someone to commit murder. 
(e) While you may want to suggest alternatives other than abortion, you can't just force woman to go through with a pregnancy.

3) When asked his position on free university education, Brian declared “You have to realise that, while you have certain rights in how society should treat you, society has the right to expect certain things from you. Education is a provision that society makes available to you so you can help yourself but that doesn’t mean that you should neglect
helping society. Requiring people to pay for their education ensures that not only do you benefit from education but so do all the other members of society.”

(i) Would Brian  
(a) support free university education  
(b) oppose free university education  
(c) be undecided

(ii) Applying logic parallel to that expressed in this case, which of the following reasons for his position on condom vending machines would Brian be most likely to express?

(a) Condom vending machines are a way of ensuring that you repay what you owe society.  
(b) Condom vending machines are a provision that society makes to help you.  
(c) Condom vending machines are something you have a right to.  
(d) Condom vending machines protect the health of everyone.  
(e) Requiring people to pay for condoms ensures that society benefits from their usage.

4) When asked her position on abortion, Rachel proclaimed “All humans start as foetuses. So aborting a foetus is ending human life prematurely. Ending a human life prematurely is usually highly illegal – we call it murder. Hence, abortion should be illegal.”

(i) Would Rachel  
(a) support abortion  
(b) oppose abortion  
(c) be undecided

(ii) Applying logic parallel to that expressed in this case, which of the following reasons for her position on condom vending machines would Rachel be most likely to express?

(a) Condom vending machines do not cause any illegal acts.  
(b) Condom vending machines prevent reproduction.  
(c) Condom vending machines are legal.  
(d) Condom vending machines cause the death of infants  
(e) Condom vending machines prevent the spread of disease.

5) When asked his position on multiculturalism, Jonathon proclaimed “Respect for our laws are important here. To function properly, a society needs respect of its legal system. If I knew that peoples of all culture would accept our laws then I would support multiculturalism but the jury is still out here.”

(i) Would Jonathon  
(a) support multiculturalism  
(b) oppose multiculturalism
(c) be undecided

(ii) Applying logic parallel to that expressed in this case, which of the following reasons for his position on abortion would Jonathon be most likely to express?

(a) We need to evaluate whether abortion will aid our society or not.
(b) While abortion is not illegal, it nevertheless encourages disrespect for others.
(c) The reactions of people from different cultures is important.
(d) The jury is still out over whether abortion has any role in the legal system.
(e) Performing abortion does not entail any legal violations.

6) When asked her position on free university education, Carla affirmed “People have the right to develop themselves as far as they can. Financial considerations such as fees prevent many people from exercising such rights.”

(i) Would Carla (a) support free university education
(b) oppose free university education
(c) be undecided

(ii) Applying logic parallel to that expressed in this case, which of the following reasons for her position on capital punishment would Carla be most likely to express?

(a) It would be nice if we gave people a second chance in such situations. They deserve it.
(b) We have to try and allow both the right to see the guilty punished and the right to a second chance to be exercised.
(c) We need to know what rights a guilty person has.
(d) If capital punishment is a right then we need to know which members of society have the responsibility to exercise this right.
(e) We have to examine financial considerations when evaluating capital punishment.
Section 4 Instructions
(to be presented with following overhead)

Section 4 contains items in the same format to the item on the overhead. Please read the first part of the question.

You will notice that it is in the same format as the first part of the questions in sections 1, 2 and 3. You answer it in identical fashion.

Please read the second part of the question.

When answering the second part of questions in section 4, you first need to extract the “core idea” behind a person’s reason (as you did in section 3). In the case of the soccer player, the issue was one of only the best being able to participate – the soccer player wasn’t good enough for the national team.

Applying this to politics, we get that only the most competent or good politicians should reach high office.

(a) expresses this opinion directly as does (d). In the case of (d) competence means competence for the position in question.

(b) uses the principle by claiming the politician lacks competence. We are still using the principle but there has been an added assumption that the person is incompetent. Note however that the principle is still being applied so this is a correct application of the principle.

(c) is the reverse of (b). We are using the principle but we are adding that the politician is competent. For these questions no one is asking you to determine facts such as whether or not the politician is competent. The only feature for you to attend to is whether or not the principle has been somehow applied.

In this case, (e) would be the correct answer because it applies a different principle. Remember you are trying to find the cases where the principle has been applied most inaccurately – applying a different principle fits this category.
When asked to explain his position on whether a great soccer player, who is past his prime, should play in a national team, Anon said “I think you have to field the best team on the day. What happened in the past is in the past. The player isn't good enough anymore.”

(i) Would Anon 
(a) support the player playing in the team  
(b) oppose the player playing in the team  
(c) be undecided  

(ii) Applying logic parallel to that expressed in this case, which of the following reasons for his position, on whether a controversial politician should be awarded a higher office would Anon be most likely not to express?

(a) If the politician is good enough for the relevant position then he should be promoted.  
(b) One cannot be competent enough for high public office if one generates a great deal of controversy.  
(c) Obviously to generate such publicity, the politician must be good at devising novel solutions to political problems.  
(d) The issue is whether or not the politician is a good choice for the position.  
(e) One should endeavour to have a political administration as untainted as possible.
Section 4 Questions

1) When asked his position on capital punishment, Ray affirmed “An eye for an eye. Murderers and the like are the scum of society. Why should we care for them? What good are they going to do anyone alive? Treat them with the same brutality that they treat others.”

   (i) Would Ray  
       (a) support capital punishment  
       (b) oppose capital punishment  
       (c) be undecided

   (ii) Applying logic parallel to that expressed in this case, which of the following reasons for his position on "work for the dole" would Ray be most likely not to express?

       (a) People on the dole are using society for money so we should use them for labour.  
       (b) People on the dole are unfortunate and so deserve support not censure.  
       (c) If people are on the dole and trying to find work, we should help them. If they are bludging then we should punish them.  
       (d) People on the dole should be treated no differently whether they are bludging or genuinely in need.  
       (e) People on the dole are looking for work so we should provide them with a job.

2) When asked her position on free university education, Sarah commented “If we were to introduce free education, people would inevitably abuse it. We would be having lots of students who would just bludge around.”

   (i) Would Sarah  
       (a) support free university education  
       (b) oppose free university education  
       (c) be undecided

   (ii) Applying logic parallel to that expressed in this case, which of the following reasons for her position on multiculturalism would Sarah be most likely not to express?

       (a) There are many people who would use multiculturalism as an excuse not to properly become part of a society.  
       (b) There are many people who would abuse the principle of multiculturalism by not accepting other cultures but demanding that others accept their culture.
(c) There are many people who would use multiculturalism as a means to further private goals such as getting elected.
(d) There are many people who would use multiculturalism in the manner intended ignoring all the long-term consequences.
(e) There are many people who would abuse the principle of multiculturalism to claim that there is nothing wrong with any feature of their culture.

3) When asked her position on “work for the dole”, Zewlan remarked “What is this doing to our society and the people in it? Is it making us more productive, helping the unemployed get jobs and so on? Or is it just punishing the unemployed? No one without a soap box to stand on has attempted to analyse this.”

(i) Would Zewlan
(a) support “work for the dole”
(b) oppose “work for the dole”
(c) be undecided

(ii) Applying logic parallel to that expressed in this case, which of the following reasons for her position on capital punishment would Zewlan be most likely not to express?

(a) The retributive nature of capital punishment has not yet been shown to either deter or not deter crime.
(b) Capital punishment applies a retributive approach to criminals which clearly does not help them get rehabilitated.
(c) We need a detailed analysis on the effect of capital punishment on society.
(d) Since capital punishment does deter criminals from committing serious crime we should implement it.
(e) As there is no community advantage from capital punishment we should not implement it.

4) When asked his position on capital punishment, John remarked “People have different opinions on this one. I mean it’s outlawed and priests and other moral figures speak out against it but still too much crime leads to a breakdown in order.”

(i) Would John
(a) support capital punishment
(b) oppose capital punishment
(c) be undecided

(ii) Applying logic parallel to that expressed in this case, which of the following reasons for his position on abortion would John be most likely not to express?

(a) There is a split amongst the clergy on whether abortion should be supported or not.
(b) While some moral leaders say it is acceptable, one has to wonder whether the attitude of indifference towards the unborn would carry through to other vulnerable members of society.
(c) While there are people both for and against it. I think the key is to focus on the overall effects of society on each individual.
(d) Most moral figures support it despite having misgivings and I take my lead from them although I understand their reservations.
(e) The issues are those of order and moral authority.

5) When asked her position on “work for the dole”, Jasmine declared “The issue is here is one of overall consequences. If “work for the dole” really does foster links between employers and employees and give self-esteem boosts to the unemployed, I’m all for it. However, if its net effect is to alienate an already marginalised group of society then I can’t support it.”

(i) Would Jasmine
   (a) support “work for the dole”
   (b) oppose “work for the dole”
   (c) be undecided

(ii) Applying logic parallel to that expressed in this case, which of the following reasons for her position on capital punishment would Jasmine be most likely not to express?

   (a) Capital punishment is likely to reduce overall crime so we should support it.
   (b) Capital punishment is unlikely to reduce overall crime so we should not support it.
   (c) We need to examine the effects on capital punishment on our society.
   (d) If capital punishment marginalises its victims then we shouldn’t support it.
   (e) The issue is whether capital punishment produces primarily positive or negative effects.

6) When asked her position on condom vending machines, Nancy disclosed “We need to look at the message we are sending. Condom machines make it easier to engage in widespread sex. This is not the way decent folk live.”

(i) Would Nancy
   (a) support condom vending machines
   (b) oppose condom vending machines
   (c) be undecided

(ii) Applying logic parallel to that expressed in this case, which of the following reasons for her position on multiculturalism would Nancy be most likely not to express?

   (a) The issue is whether or not new migrants make life easier.
(b) It depends on what the appropriate behaviour for new migrants is.
(c) Decent people give newcomers the message that they are welcome.
(d) Decent people try not to offend their host.
(e) We need to ensure that migrants and prior residents treat each other with respect.
D.5 Details of Liberalism-Conservatism Scale Validity

As discussed in the Method section of Chapter 7, the liberalism-conservative employed in Study 4 showed similar validity trends to the version employed in studies 1 and 2. The validity criteria were the same criteria used to validate the original version of the instrument namely the prediction of voting intention and self-rated liberalism-conservatism. These were discussed in the Method section of Chapter 4.

Across the Study 1 data, the shortened questionnaire was significantly correlated with voting intention ($r(134)=.41; \ p<0.001$) and self-rated liberalism-conservatism ($r(132)=.36; \ p<0.001$). As discussed in the Results section of Chapter 4, the original version of this questionnaire had corresponding $r$s of .36 and .34. Using the Meng et al. (1992) procedure to compare these validity correlations, it was revealed that they were significantly greater for the revised version compared to the original versions ($z=6.14; \ p<0.001$ for voting intention and $z=2.42; \ p<0.05$ for self-rated liberalism-conservatism). Thus, the revised version is, if anything, an improvement on the original version (even though it uses less items).

D.6 Testing For An Interaction Using a Median Split

As discussed in the Results section of Chapter 7, while Cohen et al. (2003) do not recommend it (instead preferring the approach employed in Chapter 7), the question of whether the relationship between moral comprehension and moral reasoning differs for liberals compared to conservatives (i.e., Hypothesis 3 of Section 7.6) can be examined using a median split of political scores. Because 6 scores fell on the median of political
scores in Study 4, a median split produced two sub-samples of uneven sizes. The “liberal” sub-sample contained 69 participants and the “conservative” sub-sample contained 71 participants.

To test Hypothesis 3 (using this median split procedure), the correlation between moral comprehension and p scores was compared for both these sub-samples. MCQ and p scores were significantly positively correlated for both the liberal and conservative sub-samples ($r(69)=.27, p<0.05$ and $r(71)=.26, p<0.05$ respectively). These correlations were compared with a z-test and found to be non-significant ($z=0.09, p>0.9$). Thus, the relationship between moral comprehension and moral reasoning does not appear to differ between liberals and conservatives.

Consequently, regardless of whether a regression interaction effect approach (as utilised in Chapter 7) or a median split approach (as discussed here) is employed, the relationship between moral comprehension and moral reasoning does not differ between liberals and conservatives.