



Priming Moral Identity: Process-Level Shifts in Moral Judgement Using the CNI Model

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Introduction

Background

Traditionally, research on moral judgement and decision-making has focused on examining the outcomes of the hypothetical trolley problem and its variants—particularly the switch and footbridge dilemmas (Thomson, 1985).

In neuroimaging studies using fMRI, personal dilemmas activate brain regions associated with emotion and social cognition, while impersonal dilemmas activate areas associated with reasoning and problem solving (Greene, 2001, 2004). Therefore, moral judgement is linked to a dual-process system involving intuitive, emotional (System 1) and deliberate, rational (System 2) thinking (Kahneman & Tversky, 1974).

Philosophically, System 1 aligns with deontology — rule-based moral judgement — and System 2 with consequentialism — outcome-based moral judgement (Kant, 1785; Bentham, 1789). This paradigm has faced criticism as contemporary studies examined increasingly nuanced variables (Brannon et al., 2019; Gawronski et al., 2017, 2025).

Limitations of the Traditional Paradigm

One criticism focuses on the interpretation of decisions categorized as consequentialist. Individuals high in callous traits (psychopathy, Machiavellianism, narcissism) correlate with high action tendencies in consequentialist dilemmas (Kahane, 2015). Conflating lack of inhibition towards sacrificial harm for moral virtue undermines accurate interpretation of moral motivation.

Second, there is an assumed inverse correlation between consequentialist and deontological judgement (Conway & Gawronski, 2013) which neglects the possibility that both processes jointly contribute to a single judgement (Gawronski et al., 2017).

Third, the trolley problem has been widely scrutinized for lacking both construct and ecological validity and translating poorly to real-world action (Bostyn, 2017).

The CNI Model

Gawronski's CNI model of moral decision-making (2017) addresses the criticisms of the traditional dual-process paradigm. Using a battery of moral dilemmas and multinomial modeling, it gathers insight about the determinants of moral judgement by estimating latent sensitivities:

- C = sensitivity to consequences
- N = sensitivity to moral norms
- I = general preference for inaction

Co-occurring processes can be disentangled by the inclusion of the *I* parameter and varying dilemma narratives across 2 dimensions resulting in 4 distinct dilemma types:

Table 1. Structure of Dilemma Types in the CNI Model

Dilemma Type	Consequences Support...	Moral Norms Support...
CA_NA	Action	Action
CA_NI	Action	Inaction
CI_NA	Inaction	Action
CI_NI	Inaction	Inaction

Moral Identity and Priming

Moral identity is a self-concept organized around a set of moral traits functioning as a social self-schema, which is theorized to be activated or suppressed by situational cues and consisting of the following two components (Aquino & Reed II, 2002):

- *Internalization* — the degree to which moral traits are central to self-concept
- *Symbolization* — the degree to which moral traits are expressed through actions

Research suggests that moral identity is a more powerful predictor of moral conduct than the ability to execute complex moral judgements (Blasi, 1984). Although environmental influences can shift identity activation, individuals with high internalization may show smaller effects due to high accessibility of moral identity (Aquino et al., 2009). Using the CNI model allows for testing how priming moral identity affects latent sensitivities to consequences (C), moral norms (N), and general preference for inaction (I). This moves beyond traditional methods and may provide insight into the stability of moral character.

Hypotheses

Primary Hypothesis: Moral identity priming will selectively increase *N*, with no predicted changes in *C* or *I* parameters.

Exploratory Hypothesis: The priming effect on *N* may be strongest with low moral identity internalization and weakest with high moral identity internalization. No moderation is expected for moral identity symbolization.

Conceptual Model

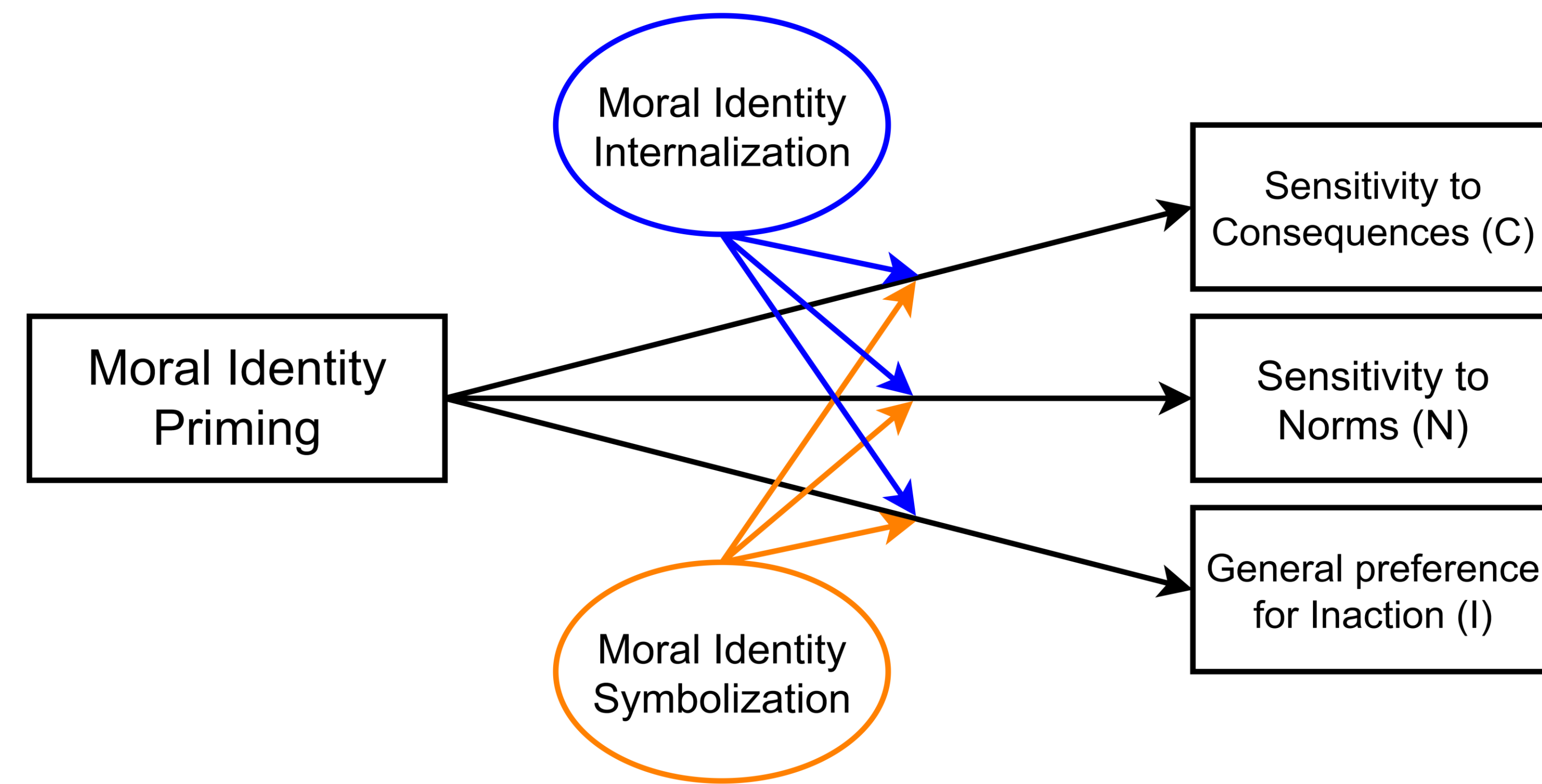


Figure 1. Rectangles represent observed variables; ovals represent latent constructs. Arrows indicate hypothesized relationships informed by relevant psychological theories and the CNI model. Paths shown in black correspond to the hypothesized direct effects of moral identity priming on *C*, *N*, and *I* parameters. Blue and orange paths represent hypothesized moderation effects of moral identity internalization and symbolization, showing how individual differences may influence these effects.

Proposed Methods

Participants

Participants will include students 18 years or older, currently enrolled in Tarleton State University in any class format, and will be recruited using the institution's Sona System.

Moral Identity Priming

The proposed study is a randomized between-subjects experimental design. Participants will be randomly assigned to a *neutral prime condition* (control) or a *moral identity prime condition* (experimental). Each participant will complete a two-part priming task consisting of: (a) writing a list of nine character traits four times each, and (b) visualizing how each word is relevant to their life and writing a brief story about themselves of 1–2 paragraphs using each of the traits at least once (Aquino et al., 2007).

Control: Neutral traits without strong moral content.

- *Carefree, Compatible, Favorable, Generally, Happy, Harmless, Open-Minded, Respectable, Polite*

Experimental: Moral traits to increase moral identity salience.

- *Caring, Compassionate, Fair, Friendly, Generous, Helpful, Hardworking, Honest, Kind*

Participants will complete a brief manipulation check.

CNI Dilemmas

Participants will respond (yes/no) to a battery of moral dilemmas presented in a fixed random order (Gawronski et al., 2017; Korner, 2020). Dilemmas vary consequences (benefits > costs vs. benefits < costs) and norm type (proscriptive vs. prescriptive), yielding four types per hypothetical scenario (Gawronski & Beer, 2016).

Moral Identity Scale (MIS)

Participants will complete the Moral Identity Scale (MIS; Aquino & Reed II, 2002), which assesses the self-importance of moral identity traits. They are presented with nine traits (Caring, Friendly, Helpful, Compassionate, Generous, Honest, Fair, Hardworking, Kind) and asked to visualize and imagine how a person with those traits would think, feel, and act. They then respond to 10 items on a 7-point Likert scale (1 = Completely Disagree, 7 = Completely Agree). The MIS includes two subscales: Internalization ($\alpha = .78$) and Symbolization ($\alpha = .69$).

Lastly, participants will complete an attention check and provide demographic data.

Planned Data Analysis

Primary Analysis: CNI Parameter Estimates

1. Data preparation: Aggregate dilemma responses (Yes = 1, No = 0) to get total Action and Inaction counts by dilemma type:

- CA_NA, CA_NI, CI_NA, and CI_NI
- *Note:* Dilemma types are coded as shown in *Table 1*.

2. Modeling: Use maximum-likelihood multinomial modeling to estimate *C*, *N*, and *I* parameters (0.0–1.0 scale).

3. Bootstrapping: Estimate parameter variability and confidence intervals.

4. Comparison: Estimates at both the group and individual will be calculated.

Exploratory Analysis: Moral Identity Moderation

Moderating effects of moral identity subscales (*Internalization* and *Symbolization*) on the priming effects for each CNI parameter will be assessed.

Analyses will be conducted in R using multinomial processing tree modeling (*MPTinR*).

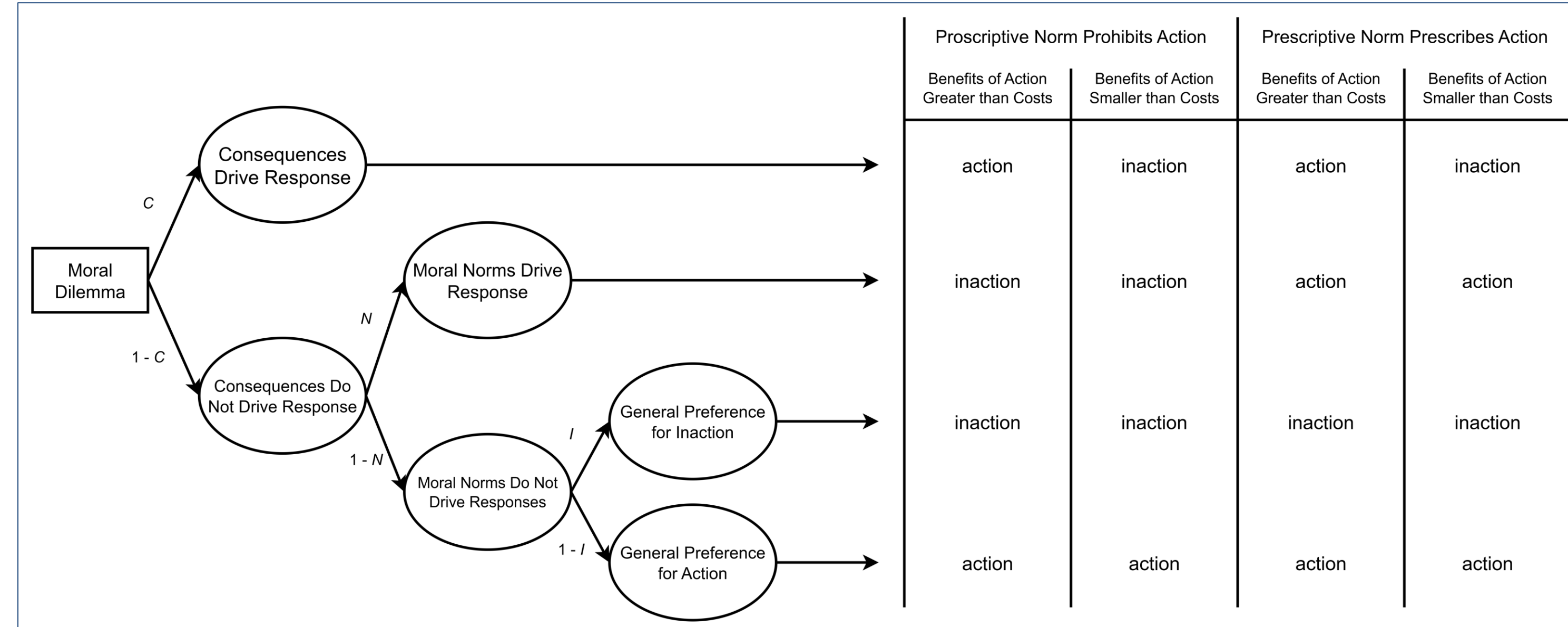


Figure 2. Multinomial processing tree illustrating the CNI model, which separates sensitivity to consequences (C), moral norms (N), and general preference for inaction (I), allowing for probabilistic estimation of latent moral processes (Gawronski et al., 2017).

Implications

Theoretical

Refining the Dual-Process Model

The proposed study challenges the notion that deontological judgements are simply automatic emotional reactions. If moral identity priming increases sensitivities to moral norms (N), this supports reinterpreting deontological judgements as moral reasoning applied to norm adherence rather than an intuitive System 1 response.

Social-Cognitive Integration and Moral Motivation

This study tests whether the accessibility of the working moral self-concept can be temporarily increased by contextual influences and whether the magnitude of priming effects depends on the centrality of moral identity.

Philosophical

Moral Generalism vs. Moral Particularism

Deontology and consequentialism are generalist theories in which universal moral principles guide moral judgement and action. Particularism—the view that the context of morally relevant features in a situation guides moral judgement and action—challenges this metaethical theory. Testing whether moral processes are stable (generalism) or invariant (particularism) under manipulation may lend support to either position.

Moral Character

This study can provide empirical evidence relevant to the Aristotelian concept of moral character — a stable, fixed set of virtuous inner dispositions that motivate and predict moral action (Athanasoulis, n.d.). Although priming may shift *C* or *N* parameters, moderation by moral identity internalization may reflect the enduring influence of moral dispositions and their role in motivating moral action in a dynamic environment.