Harm, Affect, and the Moral/Conventional Distinction

DANIEL KELLY, STEPHEN STICH, KEVIN J. HALEY,
SERENA J. ENG AND DANIEL M. T. FESSLER

Abstract: The moral/conventional task has been widely used to study the emergence of moral understanding in children and to explore the deficits in moral understanding in clinical populations. Previous studies have indicated that moral transgressions, particularly those in which a victim is harmed, evoke a signature pattern of responses in the moral/conventional task: they are judged to be serious, generalizable and not authority dependent. Moreover, this signature pattern is held to be pan-cultural and to emerge early in development. However, almost all the evidence for these claims comes from studies using harmful transgressions of the sort that primary school children might commit in the schoolyard. In a study conducted on the Internet, we used a much wider range of harm transgressions, and found that they do not evoke the signature pattern of responses found in studies using only schoolyard transgressions. Paralleling other recent work, our study provides preliminary grounds for skepticism regarding many conclusions drawn from earlier research using the moral/conventional task.

1. Introduction

Commonsense intuition seems to recognize a distinction between two quite different sorts of rules governing behavior, namely *moral rules* and *conventional rules*. Prototypical examples of moral rules include those prohibiting killing or injuring other people, stealing their property, or breaking promises. Prototypical examples of conventional rules include those prohibiting wearing gender-inappropriate clothing (e.g. men wearing dresses), licking one's plate at the dinner table, and talking in a classroom when one has not been called on by the teacher. Philosophers approaching this issue from many different perspectives have tried to specify the features that a rule must have if it is to count as moral or conventional, though no consensus has emerged (Mill 1863; Rawls 1971; Gewirth 1978; Dworkin 1978; Searle 1995). Starting in the mid-1970s, however, a number of psychologists, following the lead of Elliott Turiel, have offered characterizations of the distinction between moral and conventional rules, and have gone on to argue that the distinction is both psychologically real and psychologically important (Turiel 1979; Turiel 1983; Turiel *et al.*, 1987; Smetana 1993; Nucci 2001). Though the details

Address for correspondence: Department of Philosophy, Rutgers University, 26 Nichol Avenue, New Brunswick, NJ 08901-2882, USA.
Email: stich@ruccs.rutgers.edu

have varied over time and from one author to another, the core ideas that researchers in this tradition have advanced about moral rules are as follows:

- Moral rules have an objective, prescriptive force; they are not dependent on the authority of any individual or institution.
- Moral rules hold generally, not just locally; they not only proscribe behavior here and now, they also proscribe behavior in other countries and at other times in history.
- Violations of moral rules typically involve a victim who has been harmed, whose rights have been violated, or who has been subject to an injustice.
- Violations of moral rules are typically more serious than violations of conventional rules.

By contrast, the following are the core features of conventional rules according to the account proposed by researchers in this tradition:

- Conventional rules are arbitrary, situation-dependent rules that facilitate social coordination and organization; they do not have an objective, prescriptive force, and they can be suspended or changed by an appropriate authoritative individual or institution.
- Conventional rules are often local; the conventional rules that are applicable in one community often will not apply in other communities or at other times in history.
- Violations of conventional rules do not involve a victim who has been harmed, whose rights have been violated, or who has been subject to an injustice.
- Violations of conventional rules are typically less serious than violations of moral rules.

To make the case that the moral/conventional distinction characterized in this way is both psychologically real and psychologically important, Turiel and his associates developed an experimental paradigm (sometimes called the 'moral/conventional task') in which subjects are presented with prototypical examples of moral and conventional rule transgressions and asked a series of questions aimed at determining:

- (i)   whether the subjects consider the transgressive action to be wrong, and if so, how serious it is;
- (ii) whether the subjects think that the wrongness of the transgression is 'authority dependent,' i.e. does it depend on the existence of a socially sanctioned rule or the pronouncement of an authority figure (for example, a subject who has said that a specific rule-violating act is wrong might be asked: 'What if the teacher said there is no rule in this school about [that sort of rule violating act], would it be right to do it then?');

    (iii)   whether the subjects think the rule is general in scope; is it applicable to everyone, everywhere, or just to a limited range of people, in a restricted set of circumstances?

    (iv)   how the subjects would justify the rule; in justifying the rule, do subjects invoke harm, justice, or rights, or do they invoke the fact that the rule prevails locally and/or that it fosters the smooth running of some social organization?

Early findings using this paradigm indicated that subjects' responses to prototypical moral and conventional transgressions did indeed differ systematically (Nucci & Turiel 1978; Smetana 1981; Nucci & Nucci 1982). Transgressions of prototypical moral rules (almost always involving a victim who has clearly been harmed) were judged to be more serious, the wrongness of the transgression was not 'authority dependent,' the violated rule was judged to be general in scope, and these judgments were justified by appeal to harm, justice or rights. Transgressions of prototypical conventional rules, by contrast, were judged to be less serious, the rules themselves were authority dependent and not general in scope, and the judgments were not justified by appeal to harm, justice, and rights. During the last twenty-five years, much the same pattern has been found in an impressively diverse set of subjects ranging in age from toddlers (as young as three and a half years) to adults, with a substantial array of different nationalities and religions (e.g. Nucci *et al.*, 1983; Hollos *et al.*, 1986; Yau & Smetana 2003; for reviews, see Smetana 1993; Tisak 1995; Nucci 2001). The pattern has also been found in children with a variety of cognitive and developmental abnormalities, including autism (Blair 1996; Blair *et al.*, 2001; Nucci & Herman 1982; Smetana *et al.*, 1984; Smetana *et al.*, 1999). Much has been made of the intriguing fact that the pattern is not found in psychopaths or in children exhibiting psychopathic tendencies (Blair 1995; 1997).

What conclusions have been drawn from this impressive array of findings? Here again, the details have varied over time and from one author to another, and some of the crucial notions invoked have not been explained as clearly as one might like. Nevertheless, it is clear that a majority of investigators in this research tradition would likely endorse something like the following collection of conclusions:

    (C-1)   In moral/conventional task experiments subjects typically exhibit one of two *signature response patterns*. In the *signature moral pattern* rules are judged to be authority independent and general in scope; violations are more serious, and rules are justified by appeal to harm, justice and rights. In the *signature conventional pattern* rules are judged to be authority dependent and not general in scope; violations are less serious, and rules are not justified by appeal to harm, justice, or rights. Moreover, these signature response patterns are what philosophers of science sometimes call 'nomological clusters'—there is a strong ('lawlike') tendency for the members of the cluster to occur together.

(C-2)   (a) Transgressions involving harm, justice, or rights evoke the signature moral pattern.

(b) Transgressions that do not involve harm, justice, or rights evoke the signature conventional pattern.

(C-3)   The regularities described in (C-1) and (C-2) are pan-cultural, and they emerge quite early in development.

In recent years, both the moral/conventional task and the conclusions based on it have become widely influential among naturalistically-oriented philosophers interested in understanding the nature of moral judgment. Though Turiel and his followers maintain that the moral/conventional distinction is constructed by children as they interact with their social environment (Turiel 1979; Turiel 1983; Nucci 2001), some philosophers have argued that (C-3) suggests that knowledge of the moral/conventional distinction is innate (Dwyer 1999, 2006). In an influential article and an important recent book, Shaun Nichols (2002, 2004) builds on suggestions made by researchers who emphasize the link between morality and emotions, such as Kagan (1984), Damasio (1994) and Haidt (Haidt *et al.*, 1993; see also Greene & Haidt 2002). In developing his 'sentimental rules' hypothesis, Nichols draws out the implications of this link for work on the moral/conventional distinction. On Nichols' view, the content of both moral and conventional rules is acquired via social transmission. However people are innately disposed to have affective responses to actions with certain sorts of consequences, and transgressions of rules proscribing such actions evoke the signature moral pattern, while transgressions of rules governing actions that do not trigger affective responses evoke the signature conventional pattern.

Not everyone, however, has been persuaded by conclusions (C-1)–(C-3). For the most part, the dissenters have focused on rules and transgressions that do not deal with harm, justice, or rights. (C-2b) predicts that such transgressions should evoke the signature conventional response pattern. But, the dissenters maintain, there are many societies in which such transgressions evoke one or more of the signature moral responses, and thus, contrary to (C-3), the regularities described in (C-1) and (C-2) are not pan-cultural. For example, Haidt *et al.*, (1993) cleaved closely to the paradigm established by Turiel, and showed that low SES groups in both Brazil and the USA judged transgressions such as privately washing the toilet bowl with the national flag and privately masturbating with a dead chicken to be serious moral transgressions. Other researchers employing the moral/conventional task methodology have reported similar results. In a study of children in traditional Arab villages in Israel, Nisan (1987) found that all transgressions tested evoked most of the signature moral response pattern, including such transgressions as mixed-sex bathing and addressing a teacher by his first name, behaviors that do not involve harm, justice, or rights. In another study, Nucci and Turiel reported that orthodox Jewish children in the USA judged a number of religious rules to be authority independent even though the rules did not deal with harm, justice, or rights (Nucci & Turiel 1993; see also

Nucci 2001, chapter 2 for discussion). Perhaps most interestingly, Nichols (2002, 2004) showed that for a particular subset of etiquette rules, namely those that prohibit disgust-inducing actions, American children judged transgressions to be serious, authority independent, and general in scope. American college students judged those same etiquette rules to be serious and authority independent, though not general in scope. Nichols' results pose a clear challenge to both (C-1) and (C-2b). In his study, the putative nomological clusters posited in (C-1) come apart in two different ways and, contrary to what (C-2b) predicts, transgressions that do not involve harm, justice, or rights evoke most of the elements of the signature moral response pattern.

Taken together, the findings cited above pose a significant challenge to (C-1)–(C-3). However, none of these results involve transgressions that deal with harm, justice, or rights. Nor have we been able to find any other study in the literature that contradicts (C-2a) by demonstrating that transgressions involving harm, justice, or rights do not evoke the signature moral pattern. One possible explanation for the absence of such studies in the literature is that (C-2a) is both true and pan-cultural. Perhaps transgressions involving harm, justice, or rights do reliably and cross-culturally evoke the signature moral response pattern. However, we think there are at least three reasons to be skeptical of this explanation. First, though there are many studies employing the moral/conventional task paradigm, the range of transgressions involving harm that has been included in these studies is remarkably narrow. Early work using the paradigm was done by developmental psychologists who focused on young children; accordingly, the examples of harmful transgressions studied were all behaviors that would be familiar to youngsters, such as pulling hair or pushing someone off a swing. In the intervening years, the moral/conventional task has been used with many different subject populations, and as the range of subject populations has broadened, so has the set of transgressions that do not involve harm, justice, or rights. Some of these newer transgressions were behaviors that might not be familiar to young children. Oddly, however, all of the harmful transgressions studied have been of the 'schoolyard' variety, even when the experimental subjects were incarcerated psychopathic murderers (Blair 1995)! As a result, little is known about how people respond to a broader range of harmful transgressions in the moral/conventional task. Second, philosophical views like Bernard Williams' 'relativism of distance' and the sophisticated version of moral relativism defended by Gilbert Harman encourage the speculation that there may be many moral rules—including those prohibiting slavery, corporal punishment, and treating women as chattel—that people do not generalize to other cultures or other historical periods (Williams 1985; Harman 2000). Though no systematic evidence has been offered, we think these speculations have considerable intuitive plausibility. Third, our informal sampling of public discussion about recent news stories dealing with issues such as the treatment of detainees at the US military base in Guantanamo Bay suggests that a significant number of people do not consider moral rules prohibiting harmful treatment in such cases to be authority independent.

In light of the above considerations, we sought to explore whether there are harmful transgressions that, contrary to (C–2a), do not evoke the signature moral responses. To this end, we assembled a collection of brief scenarios describing a variety of harmful transgressions. We then created multiple versions of these scenarios: in some we varied the time and/or location of the transgression, in others we varied whether or not the transgression had been sanctioned by an appropriate authority. In order to test the hypothesis suggested by Nichols, Haidt, and others that negative affect plays a central role in generating most of the signature moral responses even when the transgression does not involve harm, we also included one non-harmful transgression that was intended to evoke strong affect. These scenarios were grouped into pairs, designed to determine whether subjects thought that the transgressions at issue were general in scope or authority dependent.

2. Methods

2.1 Participants
Participation took place via a website titled 'Four Minute Morality Survey'. Participants were recruited with the aid of links using this title posted on websites that serve as clearinghouses for online psychological research (Amoeba Web [http://www.vanguard.edu/faculty/ddegelman/amoebaweb/index.cfm?doc_id=2751], Online Social Psychology Studies [http://www.socialpsychology.org/expts.htm] and Psychology Research on the Net [http://psych.hanover.edu/Research/exponnet.html]); brief requests for participation were also posted under the Volunteers section of the community forum website Craigslist.org. Participation was wholly anonymous, and no compensation was offered. In order to ensure that participants were capable of granting informed consent, participation was restricted to those 18 years of age and over. After removing responses from individuals who did not answer all parts of the survey, we were left with 1635 participants (50.3% male; mean age = 28.09, SD 9.65), 16.1% of whom identified themselves as living outside of the United States.

2.2 Materials and Procedure
Following an introductory web page outlining the nature of participation in the study, participants viewed a web page presenting a short scenario and two questions. The first question, utilizing a binary Yes/No response, asked participants whether it was OK for the protagonist in the scenario to engage in the action described. The second question, utilizing a Likert-type scale anchored by 'Not at all bad' and 'Very bad', asked participants 'On a scale from 0 to 9, how would you rate [the protagonist's] behavior?'. Clicking on a link labeled 'Continue' led to a second web page containing information that modified or reframed the scenario presented on the previous page (for example, some of the second web pages contained the statement 'Suppose that [an authority figure had previously stated that the given behavior was not acceptable],' etc.), followed by the same two questions. Finally,

participants completed a brief demographic questionnaire including a question about current country of residence, followed by a final 'Thank You' page that displayed contact information for the investigators.

The stimulus materials consisted of 18 distinct ordered pairs of scenarios derived from 9 scenario sets. Each scenario set consisted of two related scenarios, A and B, which could be presented in two orders: A followed by B, or B followed by A. Each participant was randomly assigned to view one of the 18 ordered pairs of scenarios. Below, we describe the scenarios and the rationales behind them in greater detail.

2.3 Do Harm Norms Generalize?

According to (C–2a), transgressions involving harm evoke the signature moral pattern, and one component of that pattern is generality: actions judged wrong here and now should also be judged wrong at other times and in other cultures. So if transgressions involving harm are regarded as wrong if they are committed now (or in recent history) but are not judged to be wrong if they were committed long ago, this poses a direct challenge to (C–2a). Two of the scenario sets were designed to explore whether participants generalize their responses to transgressions of harm norms that are quite different from the schoolyard harm norms and transgressions typically used in moral/conventional task studies. An ordered pair of scenarios derived from one of those sets, which we will refer to as the 'Whipping/ Time' set, read as follows:

> Screen 1:
> Three hundred years ago, whipping was a common practice in most navies and on cargo ships. There were no laws against it, and almost everyone thought that whipping was an appropriate way to discipline sailors who disobeyed orders or were drunk on duty.
>
> Mr. Williams was an officer on a cargo ship 300 years ago. One night, while at sea, he found a sailor drunk at a time when the sailor should have been on watch. After the sailor sobered up, Williams punished the sailor by giving him 5 lashes with a whip.
>
> Is it OK for Mr. Williams to whip the sailor?
>
>   YES   NO
>
> On a scale from 0 to 9, how would you rate Mr. Williams' behavior?
> Not at all bad   Very bad
>   0 1 2 3 4 5 6 7 8 9
>
> Screen 2:
> Mr. Adams is an officer on a large modern American cargo ship in 2004. One night, while at sea, he finds a sailor drunk at a time when the sailor should

have been monitoring the radar screen. After the sailor sobers up, Adams punishes the sailor by giving him 5 lashes with a whip.
(For purposes of brevity, we hereafter omit the questions presented).

The other scenario set that focused on generalization of harm norms was explicitly inspired by the Williams-Harman conjecture. We will refer to it as the 'Slavery/Spatio-Temporal' set. One of the ordered pairs of scenarios derived from this set was the following:

> Screen 1:
> In ancient Greece and Rome, slaves were an important part of the economic and social system. Greek and Roman slaves were used as oarsmen, as soldiers, to maintain households, and to supply agricultural labor.

> Screen 2:
> In the United States, slaves were an important part of the economy of the South 200 years ago. American slaves were used mainly to maintain households, and to supply agricultural labor.

2.4 Are Harm Norms Authority Independent?

Authority independence is another component of the signature moral profile, which according to (C–2a) is evoked by transgressions involving harm. So if transgressions that are clearly harmful are not judged to be authority independent, once again this will pose a direct challenge to (C–2a). Six additional scenario sets, including four that were far removed from the schoolyard transgressions used in earlier studies, were designed to explore whether participants judged harm norms to be authority independent. An example, derived from what we will refer to as the 'Spank/Authority' set reads as follows:

> Screen 1:
> It is against the law for teachers to spank students. Ms. Williams is a third grade teacher, and she knows about the law prohibiting spanking. She has also received clear instructions from her Principal not to spank students. But when a boy in her class is very disruptive and repeatedly hits other children, she spanks him.

> Screen 2:
> Now suppose that it was not against the law for teachers to spank students, and that Ms. Williams' Principal had told her that she could spank students who misbehave if she wanted to.

As mentioned earlier, the scenarios comprising each set were presented in one of two orders. In some cases, the order of the questions could simply be reversed.

However, in scenario sets exploring authority independence, the relation between the two pairs had to be a bit more complicated. To illustrate the point, here is the other, reverse ordered pair of scenarios derived from the Spank/Authority set:

Screen 1:
Ms. Williams is a third grade teacher. Her Principal has told her that she can spank students who misbehave if she wants to, and in their state there is no law against spanking students. When a boy in her class is very disruptive and repeatedly hits other children, she spanks him.

Screen 2:
Now suppose that there was a law against spanking students in their state, and that Ms. Williams' Principal had given her clear instructions not to spank students.

A second set of scenarios designed to determine whether participants judged harm transgressions to be authority independent was the 'Military/Authority' set. One of the ordered pairs derived from this set was:

Screen 1:
For many years, the military training of elite American commandos included a simulated interrogation by enemy forces in which the trainees were threatened and physically abused. Most people in the military believe that these simulated interrogations were helpful in preparing trainees for situations they might face later in their military careers. Though no one was ever killed or permanently disabled by the physical abuse they received during these simulated interrogations, the trainees often ended up with bruises or injuries that lasted for a week or more.

Recently, the Pentagon issued orders prohibiting physical abuse in military training. Sergeant Anderson is a soldier who trains elite American commandos. He knows about the orders prohibiting physical abuse and his immediate superiors have ordered him not to do it. Nonetheless, he regularly threatens and physically abuses trainees during the simulated interrogations that he conducts.

Screen 2:
Now suppose that the Pentagon had never issued orders prohibiting physical abuse in military training, and that Sergeant Anderson's superiors had told him that the use of physical abuse was acceptable in simulated interrogations.

2.5 Does Negative Affect Generate Signature Moral Responses?
As we noted earlier, paralleling work by Haidt (Haidt *et al.*, 1993; see also Greene & Haidt, 2002), Nichols (2002, 2004) has proposed that negative affect plays a

central role in generating most of the components of the signature moral response. More specifically, Nichols maintains that subjects will be more inclined to generalize the applicability of norms and to regard them as authority independent if transgressions of the norms evoke negative affect. To test Nichols' hypothesis about the role of negative affect in generating judgments of generality, we used scenarios involving mortuary cannibalism, on the assumption that this activity would be likely to generate strong affect among our sample of internet users. Here is an ordered pair derived from what we will call the 'Cannibalism/Spatial' set:

> Screen 1:
> A number of cultures in various parts of the world traditionally engaged in the practice of eating parts of their deceased relatives' bodies as part of elaborate funeral rituals. Suppose you came upon such a funeral where people in one of these groups were eating parts of their deceased relatives' bodies.

> Screen 2:
> Now suppose there is a small group of Americans living in Northern California who have the ritual practice of eating parts of their deceased relatives' bodies as part of funeral rituals. Suppose you came upon a group of these Americans at a funeral where people were eating parts of the bodies of their deceased relatives.

3. Results

In this section, we will present an overview of some of the more interesting results. For the complete text of all the scenario pairs and full details on the results, go to: http://www.rci.rutgers.edu/~stich/Data/Data.htm.

In the Whipping/Temporal set we found a dramatic difference in subjects' judgments on the two members of the set. The results for the 'Is it OK…' question are presented on the left in Figure 1; the scalar results are on the right. Clearly, many subjects think whipping was OK 300 years ago though they do not think it is OK now.

In the Slavery scenarios (in which both spatial and temporal distance varied), we again found a dramatic difference, confirming the Williams-Harman conjecture. Combining responses from the two versions, 11% of subjects reported that slavery was OK in Greco-Roman societies, but only 7% reported that it was OK in the American South (p = 0.021). This same pattern of results held for responses to the scalar 'how bad' questions.[1]

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[1]   Significant order of presentation effects were found in all but three of our scenarios. It is not clear how this finding should be interpreted. For details, see the results available on line at http://www.rci.rutgers.edu/~stich/Data/Data.htm.
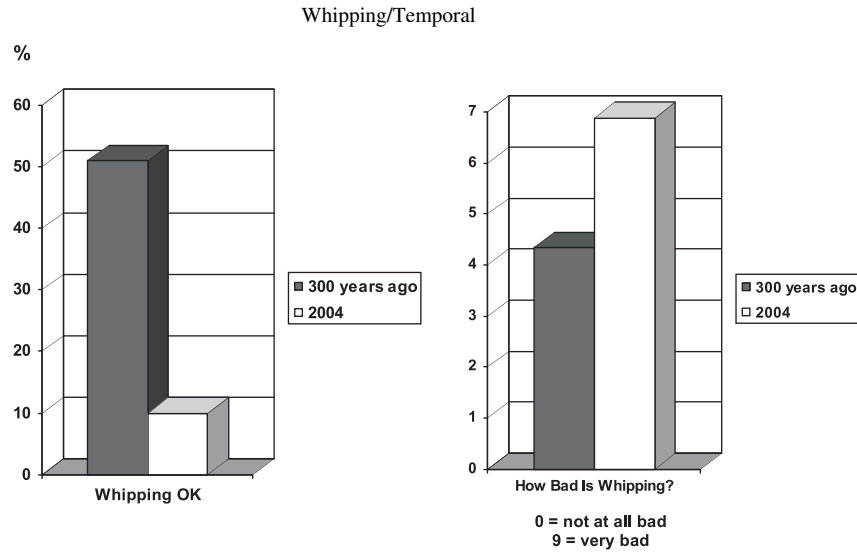
Whipping/Temporal

Figure 1 *Judgments about the acceptability of whipping a derelict sailor 300 years ago and in 2004. The bar graph on the left shows the percent of YES responses to the binary 'Is it OK?' question ($\chi^2 = 79.01$; p = 0.000). The bar graph on the right represents responses to the question: How would you rate Mr. X's behavior? (t(198) = 13.55; p = 0.000). In both bar graphs, data from the two orders of presentation are pooled.*

The results from the Spank/Authority set were also quite dramatic. Pooling data from the two orders, we find that 44% of subjects responded that it is OK to spank when spanking is not prohibited, but only 5% said it was OK when spanking is prohibited ($\chi^2 = 63.02$, p = 0.000). In the Military/Authority set, pooling the data from both orders, 58% of subjects responded that physical abuse is OK when it is not prohibited, while a mere 9% responded that it is OK when it is prohibited ($\chi^2 = 71.01$, p = 0.000). The results for both the 'Is it OK' question and the scalar question in the Military/Authority set are presented in Figure 2. In sum, in both the Military / Authority set and the Spank / Authority set many subjects do not judge the harmful transgression to be authority independent.

In addition to the Spank/Authority and the Military/Authority sets, four other scenario sets were used to explore whether subjects treat harm transgressions as authority dependent. The pattern in all of these was similar to the patterns in the Spank/Authority and Military/Authority sets. The full text of the scenarios and all of the results are available at http://www.rci.rutgers.edu/~stich/Data/Data.htm; to give the reader a rough idea of the consistent pattern that we found, here is a
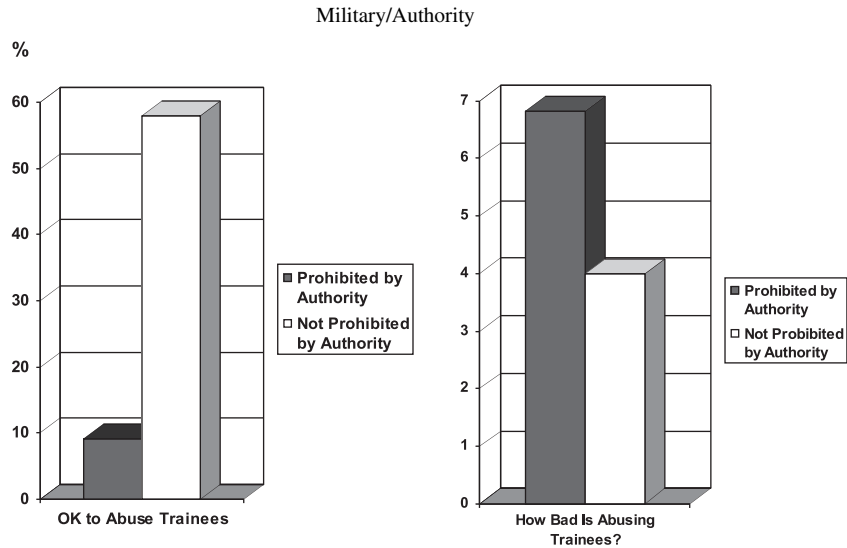
Military/Authority

Figure 2 *Judgments about the acceptability of abusing military trainees when prohibited and not prohibited by authority. The bar graph on the left shows the percent of YES responses to the binary 'Is it OK?' question ($\chi^2 = 71.01$; p = 0.000). The bar graph on the right represents responses to the question: How would you rate Sgt. Anderson's behavior? (*t(150)=12.91; p = 0.000*). In both bar graphs, data from the two orders of presentation are pooled.*

quick overview of the responses for the 'Is it OK' question, in each case pooled over the two orders of presentation:

- Whipping/Authority: OK when not prohibited: 22%; OK when prohibited: 6% ($\chi^2 = 25.26$, p = 0.000).
- Prisoner Abuse/Authority: OK when not prohibited: 15%; OK when prohibited: 1% ($\chi^2 = 20.35$, p = 0.000).
- Hair Pulling/Authority: OK when not prohibited: 14%; OK when prohibited: 4% ($\chi^2 = 12.89$, p = 0.000).
- Hitting/Authority: OK when not prohibited: 52%; OK when prohibited: 14% ($\chi^2 = 62.35$, p = 0.000).

In the Cannibalism/Spatial set, in the pooled data on the 'Is it OK' question, 74% reported that eating human flesh is OK in foreign cultures, but only 56% reported that it is OK in Northern California ($\chi^2 = 26.68$, p = 0.000). If, as we have plausibly assumed, cannibalism evokes negative affect among our subjects, then this difference poses a problem for Nichols' claim that negative affect leads people to generalize their judgments.

4. Discussion

Much of the significance of the extensive literature using the moral/conventional task paradigm derives from the support this paradigm appears to provide for the central hypotheses of the Turiel School, namely: (C-1) the signature moral response pattern and the signature conventional response pattern are *nomological clusters*; (C-2a) transgressions involving harm, justice, or rights evoke the former pattern; (C-2b) transgressions not involving harm, justice, or rights evoke the latter pattern; and (C-3) the generalizations in (C-1), (C-2a) and (C-2b) are valid across cultures. As noted in the Introduction, previous work has cast doubt on (C-1), (C-2b) and (C-3), as investigators have reported a number of cases of transgressions that do not involve harm, justice, or rights but which nonetheless evoke components of the signature moral response pattern. However, the work reviewed in the Introduction offers no reason to doubt that (C-2a) is true.

Prompted by this earlier work, Nichols proposed that important elements of the signature moral response pattern are produced by transgressions that evoke significant negative affect (Nichols 2002, 2004). This hypothesis enables Nichols to explain why etiquette transgressions that evoke disgust are judged to be authority independent; it also leads him to predict that harm transgressions, which evoke distress, will also be judged to be authority independent and general in scope.

Six of the nine scenario sets used in our study were designed to determine whether there are harm transgressions that are not judged to be authority independent. In all six cases, the response patterns indicated that a substantial number of subjects did not judge harm transgressions to be authority independent. This casts doubt on both (C-2a) and on Nichols' prediction. Two other scenario sets in our study were designed to determine whether there are harm transgressions that people do not generalize to cultures that are distant in time and/or space. In both cases, a substantial number of subjects did not generalize, a result which casts further doubt on (C-2a). Our final scenario set was designed to directly test Nichols' hypothesis that affect plays a central role in generating judgments of generality in scope. The results give reason to doubt that hypothesis as well.

In the Introduction we cited a number of studies that call into question (C-1), (C-2b) and (C-3), three of the major conclusions that have been drawn from work in the Turiel tradition. The one conclusion on our list that was not challenged by those studies was (C-2a). Though additional studies using non-schoolyard transgressions are surely needed, our findings indicate that (C-2a) may also be mistaken. Thus our work adds to what we think is a growing body of evidence justifying substantial skepticism about *all* the major conclusions that have been drawn from studies using the moral/conventional task.

We believe that our findings raise two important questions that must be addressed in future research. First, why did previous research on schoolyard harm transgressions appear to support (C-2a)? Is there something special about these simple harm transgressions that is not shared by the more 'grown-up' transgressions that we also used in our study? Second, if (C-1), (C-2a), (C-2b) and (C-3) are all mistaken,

what are the implications for studies, such as Blair's work on psychopaths and individuals with autism (1995, 1996, 1997), which have used results on the moral/conventional task as the basis for drawing important conclusions about the processes underlying moral judgment? If, as our results suggest, the moral/conventional task is not a good assay for the existence of a psychologically important distinction, then the reasoning behind those conclusions merits careful scrutiny indeed.

(DK and SS) Department of Philosophy
Rutgers University

(KJH, SJE and DMTF) Center for Behavior, Evolution, &
Culture and Department of Anthropology
University of California, Los Angeles

References

Blair, R. 1995: A cognitive developmental approach to morality: investigating the psychopath. *Cognition*, 57, 1–29.

Blair, R. 1996: Brief report: Morality in the autistic child. *Journal of Autism and Developmental Disorders*, 26, 571–579.

Blair, R., Monson, J. and Frederickson, N. 2001: Moral reasoning and conduct problems in children with emotional and behavioural difficulties. *Personality and Individual Differences*, 31, 799–811.

Blair, R. 1997: Moral reasoning and the child with psychopathic tendencies. *Personality and Individual Differences*, 26, 731–739.

Damasio, A.R. 1994: *Descartes' Error: Emotion, Reason, and the Human Brain*. New York: Avon Books.

Dworkin, R. 1978: *Taking Rights Seriously*. Cambridge, MA: Harvard University Press.

Dwyer, S. 1999: Moral competence. In K. Murasugi and R. Stainton (eds), *Philosophy and Linguistics*. Boulder, CO: Westview Press.

Dwyer, S. 2006: How good is the linguistic analogy? In P. Carruthers, S. Laurence and S. Stich (eds) *The Innate Mind vol. II: Culture and Cognition*. New York: Oxford University Press.

Gewirth, A. 1978: *Reason and Morality*. Chicago: Chicago University Press.

Greene, J. and Haidt, J. 2002: How (and where) does moral judgment work? *Trends in Cognitive Science*, 612, 517–523.

Haidt, J., Koller, S. and Dias, M. 1993: Affect, culture and morality, or is it wrong to eat your dog? *J. of Personality and Social Psychology*, 65, 613–628.

Harman, G. 2000: *Explaining Value*. Oxford: Clarendon Press.

Hollos, M., Leis, P. and Turiel, E. 1986: Social reasoning in Ijo children and adolescents in Nigerian communities. *Journal of Cross-Cultural Psychology*, 17, 352–76.

Kagan, J. 1984: *The Nature of the Child*. New York: Basic Books.

Mill, J.S. [1863] 1963: *Utilitarianism*. New York: Washington Square Press.

Nichols, S. 2002: Norms with feeling: toward a psychological account of moral judgment. *Cognition*, 84, 223–236.

Nichols, S. 2004: *Sentimental Rules: On the Natural Foundations of Moral Judgment*. Oxford: Oxford University Press.

Nisan, M. 1987: Moral norms and social conventions: A cross-cultural comparison. *Developmental Psychology*, 23, 719–725.

Nucci, L. 2001: *Education in the Moral Domain*. Cambridge: Cambridge University Press.

Nucci, L. and Herman S. 1982: Behavioral disordered children's conceptions of moral, conventional, and personal issues. *Journal of Abnormal Child Psychology*, 10, 411–425.

Nucci, L. and Nucci. M. 1982: Children's social interactions in the context of moral and conventional transgressions. *Child Development*, 53, 403–412.

Nucci, L., Turiel, E. and Encarnacion-Gawrych, G. 1983: Children's social interactions and social concepts in the Virgin Islands. *Journal of Cross-Cultural Psychology*, 14, 469–87.

Nucci, L. and Turiel, E. 1978: Social interactions and the development of social concepts in preschool children. *Child Development*, 49, 400–407.

Nucci, L. and Turiel, E. 1993: God's word, religious rules, and their relation to Christian and Jewish children's concepts of morality. *Child Development*, 64, 1475–1491.

Rawls, J. 1971: *A Theory of Justice*. Cambridge, MA: Harvard University Press.

Searle, J.R. 1995: *The Construction of Social Reality*. New York: Free Press.

Smetana, J. 1981: Preschool children's conceptions of moral and social rules. *Child Development*, 52, 1333–1336.

Smetana, J. 1993: Understanding of social rules. In M. Bennett (ed.), *The Development of Social Cognition: The Child as Psychologist*. New York: Guilford Press.

Smetana, J., Kelly, M. and Twentyman, C. 1984: Abused, neglected, and nonmaltreated children's conceptions of moral and social-conventional transgressions. *Child Development*, 55, 277–287.

Smetana, J., Toth, S., Cicchetti, D., Bruce, J., Kane P. and Daddis, C. 1999: Maltreated and nonmaltreated preschoolers' conceptions of hypothetical and actual moral transgressions. *Developmental Psychology*, 35, 269–281

Tisak, M. 1995: Domains of social reasoning and beyond. In R. Vasta (ed.), *Annals of Child Development*, vol. 11. London: Jessica Kingsley.

Turiel, E. 1979: Distinct conceptual and developmental domains: social convention and morality. In Howe, H. and Keasey, C. (eds), *Nebraska Symposium on Motivation, 1977: Social Cognitive Development*. Lincoln: University of Nebraska Press.

Turiel, E. 1983: *The Development of Social Knowledge*. Cambridge: Cambridge University Press.

Turiel, E., Killen, M. and Helwig C. 1987: Morality: it's structure, functions, and vagaries. In J. Kagan and S. Lamb (eds), *The Emergence of Morality in Young Children*. Chicago: The University of Chicago Press.

Williams, B. 1985: *Ethics and the Limits of Philosophy*. Cambridge, MA: Harvard University Press.

Yau, J. and Smetana J. 2003: Conceptions of moral, social-conventional, and personal events among Chinese preschoolers in Hong Kong. *Child Development*, 74, 1647–658.