
Children Who Choose Not to Eat Meat: A Study of Early Moral Decision-making

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Abstract

Can young children frame their own choices in terms of moral considerations, particularly when those choices do not match the practices of immediate authority figures? To answer this question, we studied 6- to 10-year-old independent vegetarians—children who have elected to become vegetarians, despite being raised in non-vegetarian families. In Study 1, these children were asked about their reasons for not eating meat; their replies were compared with those made by vegetarian children from vegetarian families (family vegetarians) and non-vegetarian children from non-vegetarian families (non-vegetarians). Unlike the other two groups, independent vegetarians universally focused on the suffering that meat eating implies for animals but, surprisingly, they did not condemn others for meat eating. Study 2 attempted to explain this tolerance by examining if children focus on whether an individual has made a commitment to not eating meat. All three groups of children condemned meat eating by morally committed vegetarians, but not by those who have made no such commitment. The two studies show that independent vegetarians are committed to not eating meat on moral grounds and judge that it would be wrong to break that commitment. Nevertheless, like non-vegetarian children, they remain tolerant toward people who have made no such commitment.

Keywords: morality; commitment; vegetarianism; tolerance

Introduction

Domain theorists have shown that young children have a distinctive conception of the moral domain, as compared with the social-conventional and personal domains. Firstly, preschoolers recognize that ‘moral’ transgressions (e.g., hitting, stealing) are more serious than ‘social-conventional’ transgressions (e.g., not sitting in an assigned seat, using inappropriate forms of address). Secondly, they distinguish the moral and social-conventional domains from the personal domain. They recognize that many actions (e.g., recreational activities, wearing certain clothes) are matters of personal choice and do not call for an evaluative judgment. Thirdly, preschoolers show some understanding that moral transgressions, unlike social-conventional transgressions and personal choices, would be wrong even in the absence of rules or sanctions imposed by authority figures. Thus, they judge that hitting would be wrong even in a school with no rules or

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sanctions concerning hitting. Moreover, they justify such judgments by reference to the harm and suffering that moral transgressions cause to the victim of such acts. By implication, young children can reach their own conclusions about what is wrong in the absence of prescriptions by authority and judge actions that cause harm and distress as unacceptable (for a complete review of this literature, see Smetana, 2006; Turiel, 2006).

Despite the multitude of events that can be unequivocally categorized as moral, social-conventional, or personal, not all actions can be classified exclusively within one of these three domains. Examples of such actions, identified as 'nonprototypical' or 'mixed domain', include abortion, corporal punishment, homosexuality, incest, pornography, and polluting (Kahn, 2006; Smetana, 1981; Turiel, Hildebrandt, & Wainryb, 1991; Wainryb, 1991).

Research with adults and adolescents has shown that such mixed domain actions can be categorized as either a moral transgression or a personal choice by different individuals. For example, Smetana (1981) examined young pregnant women's opinions about abortion. She found that these women were generally in agreement when they made judgments about various hypothetical scenarios from the moral, social-conventional, and personal domains, but when they discussed the topic of abortion, their unanimity was greatly diminished. Whereas some of the women perceived abortion as a moral choice, others perceived abortion as a personal choice. Those women who interpreted abortion as a moral choice tended to assume that life began at conception, whereas those women who interpreted abortion as a personal choice tended to assume that life began at birth. Thus, each woman's individual belief about abortion appears to have influenced her evaluation of this action. Smetana concluded that reasoning and behavior were strongly associated and that an individual's conception of an issue as either moral or personal may ultimately guide her actions.

Subsequent research with adults and adolescents (Turiel et al., 1991; Wainryb, 1991; Wainryb & Turiel, 1993) has consolidated the conclusion that individuals differ from one another in their beliefs about particular mixed domain actions. For example, in Wainryb's study, participants' beliefs about spanking tended to guide their judgments of this action: those who believed that children learn when they are spanked tended to interpret corporal punishment as similar to other personal choices, whereas participants who believed that children do not learn when they are spanked tended to interpret corporal punishment as similar to other moral choices. Thus, like other studies on mixed domain issues, Wainryb concluded that the informational assumptions an individual holds for a particular event will likely guide his/her evaluation of that event.

Research on mixed domain issues has focused primarily on how teenagers or adults vary in making choices that can be classified as either moral or personal (e.g., Helwig, 1995; Smetana, 1981; Turiel et al., 1991). There is a dearth of studies examining how far children vary in the same way. To examine this issue, we studied a group of independent vegetarians: children who choose not to eat meat, despite being raised in non-vegetarian families. According to a survey conducted by Harris Interactive in 2005 (as cited in Stahler, 2005), 5 percent of children in the USA between 8 and 12 years old are vegetarians. However, no research, including the Harris Interactive survey has studied this unique population of children to determine why they abstain from eating meat and to what extent they view the act of eating meat differently from other children.

We asked if independent vegetarians frame their decision not to eat meat in terms of moral considerations. To highlight the conception of meat eating within this relatively unusual group, we also interviewed family vegetarians—vegetarian children from

vegetarian families—as well as non-vegetarians—meat-eating children from meat-eating families. All children were asked to cite a type of meat that they did not eat and to explain their reasons. Based on findings with adults, it was expected that the children as a group would identify various considerations, including animal welfare, religion, health, and taste (Beardsworth & Bryman, 2004; Beardsworth & Keil, 1992; Haste, 2004; Rozin, Markwith, & Stoess, 1997). However, we predicted that if independent vegetarians frame their decision not to eat meat in terms of moral considerations, they would focus primarily on animal welfare. By contrast, if non-vegetarians regard their decision not to eat meat as a personal choice, they should supply reasons connected to taste or health considerations. Finally, we expected that most family vegetarians—like independent vegetarians—would refer to the death or suffering of animals that eating meat entails. This prediction was based on the assumption that the vegetarian families in our study would follow the trends of previous samples of vegetarian adults and would likely share these reasons with their children.

Our second question was whether independent vegetarians think of the act of meat eating as similar to other moral transgressions. Having decided to avoid meat, independent vegetarians might condemn anyone who continues to eat it because meat eating by any individual involves the death and suffering of the animals supplying the meat. Alternatively, independent vegetarians might profess tolerance toward meat-eaters, especially given that their own family members eat meat. It is noteworthy that some studies have demonstrated that adults who abstain from eating meat for moral reasons tend to object to others eating meat as well (Rozin et al., 1997). On the other hand, some vegetarian adults display a tolerance toward others eating meat (Monin, 2007).

Finally, assuming that independent vegetarians do, in fact, differ from their peers in the way that they interpret eating meat, we asked if they would display a different pattern of reasoning from their peers in other domains. Although we thought this possibility was unlikely, like Smetana (1981) we decided that it was important to examine this latter issue for a baseline comparison. Thus, children were presented with actions falling into four different domains: moral transgressions (e.g., stealing); social-conventional transgressions (e.g., eating salad with fingers), actions involving a personal choice (e.g., reading during recess), as well as actions involving meat eating (e.g., eating a roast beef sandwich). To assess the permissibility of these actions in the absence of authority sanctions, we made use of a procedure often employed by domain theorists (Smetana, 2006). We invited children to judge the actions presented under two conditions: (1) a regular school context and (2) a school with no rules. We anticipated that the three groups of children would differ in their reasoning about meat eating, but nevertheless, reach the same conclusions about moral transgressions, social-conventional transgressions, and personal choices, regardless of school environment. Thus, we predicted that all children would typically judge moral transgressions as very bad, social-conventional transgressions as somewhat bad, and personal choices as acceptable.

Study 1

Method

Participants. Participants were 48 middle-class children ranging from 6 to 10 years of age. They consisted of three groups: 16 independent vegetarians (mean age = 8

years 10 months, $SD = 1.14$); 16 family vegetarians (mean age = 8 years 8 months, $SD = 1.50$); and 16 non-vegetarians (mean age = 8 years 8 months, $SD = 1.15$). Each of the three groups was composed of five boys and 11 girls. Both groups of vegetarian children were recruited through snowball sampling in suburban neighborhoods surrounding a major northeast metropolitan area in the United States. Non-vegetarian children, of similar age and gender to the vegetarian children, were then recruited to participate in the study. These children lived in suburban neighborhoods of two major northeast metropolitan areas. All of the children were White, with the exception of three female vegetarians and two male vegetarians, who were Hindu-Indian. Four of these children had vegetarian parents and one (female) had non-vegetarian parents.

Design and Procedure. To probe children's reasons for not eating meat, the interviewer talked to children about their food preferences. The interview was audiotaped and subsequently transcribed. Children were asked to indicate foods that they loved to eat and foods that they hated to eat. In the course of the conversation, all children indicated a type of meat that they did not eat. Once such an item had been identified, the interviewer asked: 'So you don't eat _____. Why not?'

Children's explanations for not eating an item of meat were allocated to five categories: *animal welfare* (references to the death or suffering of animals entailed by meat eating, e.g., 'I don't like the idea of killing animals'); *religion* (references to the prescriptions or practices of a given religion, e.g., 'In my religion, you don't eat meat'); *practices* (references to the practices or beliefs of the child's family, e.g., 'If my parents weren't vegetarian, I wouldn't be vegetarian either'); *taste* (references to personal taste preferences, e.g., 'It tastes kind of like weird'); and *health* (references to the health consequences of eating the item, e.g., 'I think they [corn and carrots] are healthy [as compared to chicken] . . .'). No children mentioned ecological concerns although these do figure in the replies of vegetarian adults (Beardsworth & Keil, 1992). Note that we probed children for their own, spontaneously provided explanations. We did not ask children to evaluate each of these five explanations for avoiding meat because we feared such an exercise would introduce children to reasons for avoiding meat that they had not previously considered.

To assess children's evaluation of meat eating, as well as actions falling into the other three domains, children were presented in a random order with 12 story cards depicting three moral transgressions (stealing a quarter from a classmate, pushing a classmate out of the way so as to be first in line, and grabbing a toy from a classmate); three social-conventional transgressions (eating salad with fingers, not pushing in a chair upon dismissal from class, and leaving a dirty wrapper on the table after a snack); three personal choices (eating lunch with one group of friends rather than another, reading during recess, and coloring a drawing with a purple crayon); and three meat-eating acts (eating scrambled eggs with a side of meat, eating a roast beef sandwich, and eating a pizza with sausage). The gender of the story card character matched the gender of the participant (Susan for girls, Sam for boys). Children were asked to judge each depicted action as 'OK', 'a little bad', or 'very bad'. When the children initially judged the story character's actions, the school context was not qualified. Thus, children were left to make their own assumptions about the story character's school environment. After making these initial judgments, children judged the 12 events again; however, this time they were invited to pretend that the story character attended 'a school with no rules'.

Table 1. Study 1: Number of Vegetarian and Non-vegetarian Children Offering Specific Explanations for Abstaining from Eating Meat (N = 48)

| | Animal welfare | Religion | Practices | Taste | Health |
|--|----------------|----------|-----------|-------|--------|
| Vegetarians with non-vegetarian parents (N = 16) | 16 | 0 | 0 | 3 | 1 |
| Vegetarians with vegetarian parents (N = 16) | 7 | 3 | 5 | 0 | 1 |
| Non-vegetarian (N = 16) | 0 | 0 | 0 | 13 | 5 |

Note: Some children offered more than one explanation.

Results

We first describe children's explanations for not eating an item of meat and then turn to children's judgments of the 12-story items.

Two raters independently coded the replies made by 75 percent of the total sample; interrater agreement was .90, as calculated by Cohen's Kappa. Table 1 shows the number of children in each group whose explanations referred to one or more of the five categories outlined in the Methods section. Note that some children gave an explanation that could be assigned to two categories (e.g., the following explanation was assigned to the categories of health and taste: 'I think they [corn and carrots] are healthy [as compared to chicken] . . . I also like the taste of corn and carrots better than chicken').

Table 1 shows that references to animal welfare were universal among independent vegetarians. Such references also occurred among family vegetarians but less frequently. Finally, animal welfare was never mentioned by non-vegetarians. They referred exclusively to taste and health considerations. Chi-square tests confirmed that references to animal welfare were more frequent among independent vegetarians as compared with family vegetarians, $\chi^2 (N = 16) = 12.52, p < .001$ or non-vegetarians, $\chi^2 (N = 16) = 32.00, p < .001$. In addition, such references were more frequent among family vegetarians than among non-vegetarians, $\chi^2 (N = 16) = 8.96, p < .003$.

Children's judgments of the 12-story items falling into four different domains were scored as 0 for 'OK', 1 for 'a little bad', and 2 for 'very bad'. Judgments within each domain (moral, social-conventional, personal, and meat eating) were averaged so that each participant received an overall score for each of the four domains. Figure 1 shows children's mean scores as a function of Group and Domain.

Figure 1 demonstrates that children in all three groups judged moral transgressions more severely than social-conventional transgressions and rarely condemned personal choices. In addition, all three groups judged meat eating in the same way as personal choices.

To analyze the results presented in Figure 1, a repeated measures analysis of covariance (ANCOVA) of Group (independent vegetarians, family vegetarians, and non-vegetarians) \times Domain (moral, social-conventional, personal, and meat eating) was conducted with the child's gender and age included as covariates. This analysis produced a significant main effect for Domain, $F(3, 43) = 528.42, p < .001$. There was no main effect of Group, $F(2, 43) = 1.08, p = .35$ and no significant two-way interaction

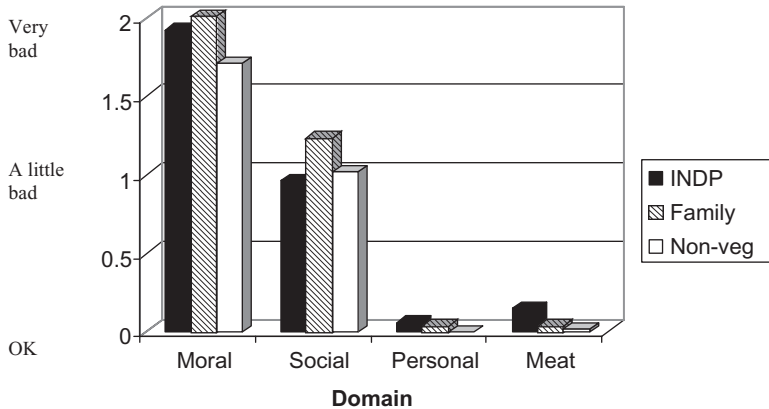


Figure 1. Study 1: Average Judgments by Independent Vegetarians, Family Vegetarians and Non-vegetarians of Four Domains (Moral, Social Conventional, Personal and Meat Eating) (N = 48).

Note: Responses reflect a three-point scale where 0 = OK, 1 = a little bad, and 2 = very bad.

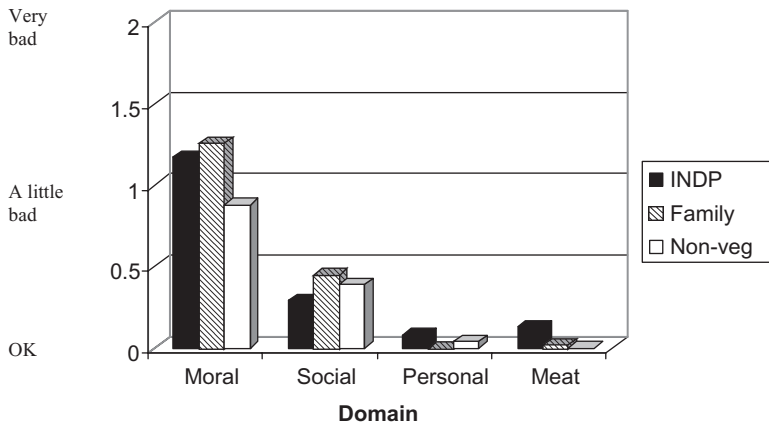


Figure 2. Study 1: Average Judgments by Independent Vegetarians, Family Vegetarians and Non-vegetarians of Four Domains (Moral, Social-Conventional, Personal, and Meat Eating) in a School with No Rules (N = 48).

Note: Responses reflect a three-point scale where 0 = OK, 1 = a little bad, and 2 = very bad.

of Group \times Domain, $F(6, 129) = 1.79, p = .11$. Neither covariate—age nor gender—was a statistically significant predictor of the outcome ($p = .16$ and $.73$), respectively. Thus, children from all three groups differentiated among the moral, social-conventional, and personal domains, and judged personal choices and meat eating as equally acceptable.

To check that even in the absence of school rules children typically judged moral transgressions more severely than social-conventional transgressions and that they judged personal and meat-eating events similarly (as Figure 2 indicates), a repeated-measures ANCOVA of Group (independent vegetarians, family vegetarians, and

non-vegetarians) \times Domain (moral, social-conventional, personal, and meat eating) was conducted with the child's gender and age included as covariates. There was a significant main effect for Domain, $F(3, 43) = 8.26, p < .01$. Once again, moral transgressions were evaluated as significantly more serious than other events. There was no main effect of Group, $F(2, 43) = 1.89, p = .16$ and no significant two-way interaction of Group \times Domain, $F(6, 129) = 1.84, p = .17$. Neither covariate—age nor gender—was a statistically significant predictor of the outcome ($p = .98$ and $.93$), respectively. Thus, the three groups of children made similar judgments about moral, social-conventional, personal, and meat-eating events in the school with no rules.

In summary, children were sensitive to the Domain under consideration, both in an ordinary school and in a school with no rules. This Domain sensitivity was equally apparent between vegetarian and non-vegetarian children. Finally, all three groups of children typically judged meat eating to be 'OK' just as they judged personal choices to be 'OK'. Thus, these analyses provide no evidence that either independent or family vegetarians think of meat eating as a moral transgression. Instead, like non-vegetarian children, they think of meat eating as a personal choice.

Discussion

We asked independent vegetarians—children who had chosen to become vegetarians despite growing up in meat-eating families—why they did not eat a particular type of meat. They all referred to the death or suffering of animals. Non-vegetarians never mentioned animal welfare, focusing instead on taste and health considerations. Family vegetarians—vegetarian children from vegetarian families—also mentioned animal welfare, but less often than independent vegetarians. Despite these differences among the groups with respect to meat eating, they made similar judgments about other types of transgressions. Thus, all three groups judged moral transgressions to be more serious than social-conventional transgressions and personal choices, and all three groups judged personal choices and meat eating as equally acceptable. Children displayed this pattern of judgment even with respect to a school with no rules.

In the Introduction, we asked if children who have chosen not to eat meat make that choice on moral grounds. There are several positive reasons for concluding that independent vegetarians are indeed making a moral choice. At the same time, there are important ways in which this conclusion needs qualification. We first discuss the positive reasons and then turn to the qualifications.

When preschoolers are asked to explain why it is bad to engage in actions generally regarded as moral transgressions (e.g., hitting or stealing), they typically focus on the harm and suffering of the victim (Smetana, 2006; Turiel, 2006). Independent vegetarians displayed the same focus—they referred to the harm and suffering that meat eating inflicts on animals. Admittedly, earlier research has documented children's references to human rather than animal suffering. It is reasonable, however, to assume that children who make choices based on animal welfare have simply 'expanded the circle' (Singer, 1981) within which such considerations apply. They have not shifted to a new set of non-moral considerations.

The second reason for concluding that the independent vegetarians were making moral choices is that they rarely referred to personal factors, such as taste and health, when explaining why they avoid meat. By contrast, these were the only factors invoked by non-vegetarians. Thus, children of this age typically make food choices having nothing to do with morality, but the children who have elected to become vegetarian do

give moral reasons when explaining why they avoid meat. Although they occasionally mentioned personal considerations, they universally mentioned animal welfare when explaining their abstinence from meat eating.

These findings suggest that independent vegetarians frame their decision not to eat meat in terms of moral considerations. Indeed, they invoke the same type of considerations as children do with respect to story protagonists who engage in various transgressions toward their peers, namely the harm and suffering of the victim (Smetana, 2006; Turiel, 2006). Furthermore, these independent vegetarians choose not to eat meat even though they regularly observe meat eating by immediate authority figures, namely their parents.

Despite the above evidence for morally-grounded decision-making on the part of independent vegetarians, they, like the other children, judged eating meat to be as acceptable as other personal choices. Thus, the independent vegetarian did not eat meat themselves, but they were surprisingly tolerant of meat eating by others. Viewed against the independent vegetarians' commitment to not eating meat, the non-judgmental stance these same vegetarians take toward other people eating meat is intriguing. How should this non-judgmental stance be explained and does it jeopardize the conclusion that independent vegetarians are making a moral choice in not eating meat?

Since they do not object to meat eating by other people, it could be argued that these independent vegetarians ultimately regard eating meat as an entirely personal decision rather than a moral decision. However, the argument that these children think of meat eating as a personal decision is inconsistent with the independent vegetarians' explanations as to why they themselves do not eat meat. As noted, they all say that they do not eat meat because of the pain and loss of life inflicted on animals. Unlike non-vegetarians, they rarely offer explanations based in terms of personal considerations, such as taste or health.

Another possible explanation for the non-judgmental stance of independent vegetarians may be related to the research of Wainryb and her colleagues (Wainryb, 1993; Wainryb & Ford, 1998; Wainryb, Shaw, Langley, Cottam, & Lewis, 2004; Wainryb, Shaw, & Maianu, 1998) on the relationship between informational assumptions and tolerance. They found that children are more tolerant of others' actions, particularly actions that oppose their own moral stance, if they consider the informational assumptions that may have led to such actions. Thus, independent vegetarians might interpret meat eating by others as permissible because they acknowledge the beliefs of meat-eaters (e.g., animals are meant to be eaten) when they judge this action. Although this acknowledgement may contribute to the tolerance that independent vegetarians demonstrate, it is unlikely to be the main explanation of why they are tolerant of meat eating by other people for two reasons. Firstly, unlike the participants in Wainryb's studies, children in the current study received no information about the story character's beliefs about meat eating; and secondly, participants never justified their tolerance of meat eating in terms of the beliefs they attributed to the story protagonist.

A third possible explanation for the non-judgmental stance of independent vegetarians is that it allows them to skirt a condemnation that would logically apply not just to the story protagonist but also to members of their own meat-eating families. However, family vegetarians also avoided any condemnation of meat eating by a story protagonist. Thus, it is likely that the children who had elected not to eat meat genuinely regarded meat eating as a matter of personal choice.

A more plausible explanation for the independent vegetarians' non-judgmental stance toward others' meat eating may be related to children's conception of commitment. They may focus on whether the individual in question has made a commitment to not eating meat. If a person has *not* made a commitment, then children may feel it is not their place to judge that person for his or her food choices. Conversely, if an individual has made a commitment to vegetarianism, then they may feel justified in judging that person's decision to eat meat.

Research on children's moral development has not specifically addressed the question of how children respond to broken commitments. Children may interpret the breaking of any commitment as a serious transgression, insofar as commitments represent a pledge to carry out an action (Mant & Perner, 1988). They may interpret breaking a commitment as an extension of a lie, thus classifying such actions as serious transgressions. In addition, children may take the basis for a commitment into account. For example, they may regard the breaking of a moral commitment as more serious than the breaking of a personal commitment.

Study 2

Study 2 was designed to examine children's conception of commitment, notably the commitment not to eat meat. As previously stated, one plausible hypothesis for the independent vegetarians' acceptance of meat eating is that they may focus on whether the individual in question has made a commitment to not eating meat. Thus, they condemn individuals who eat meat only if they have made a commitment not to do so.

As a further probe of children's conception of commitment, they were asked to judge individuals who had made either a personal or moral commitment not to eat meat.

If children's judgments take the nature of an individual's commitment into account, then they should be more likely to condemn individuals who break a moral commitment to abstain from eating meat as opposed to individuals who break a personal commitment or individuals who never made such a commitment at all.

Method

Participants. Participants in Study 2 were 55 middle-class children. As in Study 1, they consisted of three groups: (1) independent vegetarians, (2) family vegetarians, and (3) non-vegetarians. Eight children from each group had participated in Study 1. As with Study 1, the vegetarian children were recruited by snowball sampling in the suburban neighborhoods surrounding a major northeast metropolitan area. Non-vegetarian children, of similar age and gender to the vegetarian children, were then recruited to participate from similar areas. The group of independent vegetarians consisted of 17 children (three boys and 14 girls) between the ages of seven and 10 years (mean age = 9 years 1 month, $SD = .93$). The family vegetarians consisted of 19 children (six boys and 13 girls) between the ages of six and 10 years (mean age = 9 years 0 months, $SD = 1.20$). The non-vegetarian children consisted of 19 children (six boys and 13 girls) between the ages of seven and 10 years (mean age = 9 years 0 months, $SD = .97$). Three of the family vegetarians were Hindu-Indian. All remaining children were White.

Design and Procedure. Children in Study 2 were presented with five cards, one at a time, in a random order, each displaying a picture of a type of meat (a piece of steak,

a roast beef sandwich, a piece of sausage pizza, a hamburger, and a ham sandwich). All of the cards included a caption that named the pictured meat item, which was read to the participants when the card was presented.

Children were also presented with four additional cards, one at a time, again in random order. Each of these subsequent cards depicted a different individual (the Agent). The four agents were: (1) a morally-committed vegetarian, (2) a personally-committed vegetarian, (3) an uncommitted individual, and (4) the participating child herself/himself. All of these cards also included a caption (see Appendix) that described the particular individual. These captions were read to the children as the cards were presented to them.

At this point, children were asked to blindly choose one of the five meat item cards, which was put face-up on the table. The procedure was repeated with the agent cards. Then participants were asked to judge the severity ('OK', 'a little bad', 'bad', 'very bad', or 'very, very bad') of the chosen individual eating the chosen meat item. (Note that this judgment scale was increased from the three-point scale used in Study 1 in order to create a more sensitive measure.) The procedure was repeated for the remaining three agents. Once participants had judged all four individuals, each eating a given meat item, they chose another meat item and again judged all four individuals eating this particular meat item. This procedure was repeated so that children offered a judgment of each individual eating each type of meat item for a total of 20 judgments.

Results

Figure 3 displays children's averaged judgments as a function of Group and Agent. Preliminary inspection of Figure 3 reveals that all children, irrespective of their own status, tended to judge the morally committed vegetarian severely and the personally committed vegetarian less severely for eating meat; they tended not to condemn the

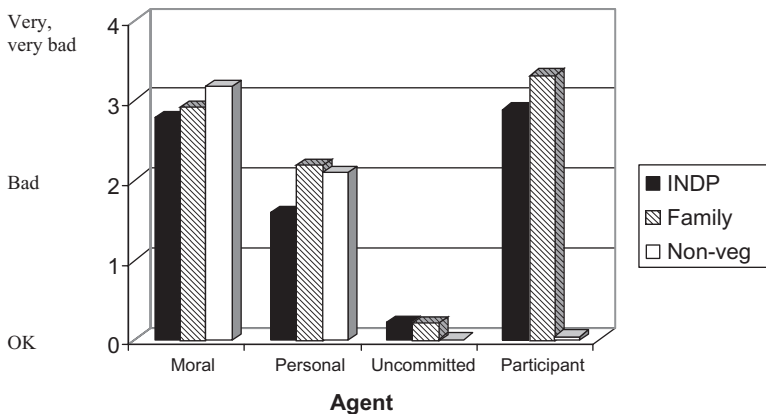


Figure 3. Study 2: Average Judgments by Independent Vegetarians, Family Vegetarians and Non-vegetarians of Four Agents (a Morally Committed Vegetarian, a Personally Committed Vegetarian, an Uncommitted Individual, and the Participant himself or herself) (N = 55).

Note: Responses reflect a five-point scale where 0 = OK, 1 = a little bit bad, 2 = bad, 3 = very bad, and 4 = very, very bad.

uncommitted individual for eating meat. By contrast, judgments of the self as Agent varied by Group.

To check these conclusions, a repeated measures ANCOVA of Group \times Agent was conducted with the child's gender and age included as covariates. This analysis revealed statistically significant main effects of both Agent ($F(2.78, 144.53) = 168.82, p < .001$) and Group ($F(2, 52) = 9.30, p < .001$), and a statistically significant two-way interaction of Agent by Group ($F(5.56, 144.53) = 35.74, p < .001$). Neither covariate—age nor gender—was a statistically significant predictor of the outcome ($p = .35$ and $.74$, respectively).

Contrast analyses confirmed that, regardless of Group, children judged the morally committed vegetarian more severely for eating meat than the personally committed vegetarian ($F(1, 52) = 440.72, p < .001$), and the personally committed vegetarian more severely for eating meat than the uncommitted individual ($F(1, 52) = 135.78, p < .001$).

Orthogonal contrasts within groups were conducted to examine children's judgment of themselves as Agent as compared with other people. Independent vegetarians judged their own meat eating more severely than meat eating by a personally committed vegetarian ($p < .001$) or by an uncommitted individual ($p < .001$). However, they judged meat eating by themselves or by a morally committed vegetarian with equal severity.

Family vegetarians also judged their own meat eating more severely than meat eating by a personally committed vegetarian ($p < .001$) or by an uncommitted individual ($p < .001$). Indeed, they judged their own meat eating more severely than meat eating by a morally committed vegetarian ($p < .002$).

Non-vegetarian children judged both the morally committed vegetarian and the personally committed vegetarian more severely for eating meat than themselves ($p < .000$, in each case) but made no differentiation between the uncommitted individual and themselves ($p = .28$).

In summary, all children judged the morally committed vegetarian severely ('very bad') for eating meat; they judged the personally committed vegetarian less severely ('bad'); and they did not condemn the uncommitted individual at all ('OK'). However, children varied in their judgments of their own behavior. Although non-vegetarians judged it 'OK' if they themselves ate meat, both groups of vegetarian children judged it to be 'very bad' if they ate meat. Furthermore, non-vegetarian children judged themselves similarly to an uncommitted individual for eating meat, independent vegetarians judged themselves as severely as a morally committed vegetarian, and family vegetarians judged themselves more severely than all other individuals.

Discussion

All children judged the morally committed vegetarian severely ('very bad') for eating meat, they judged the personally committed vegetarian somewhat less severely ('bad'), and they did not condemn the uncommitted individual at all ('OK'). These findings show that independent vegetarians' tolerance of meat eating on the part of other people is part of a broader conception of commitment that is displayed by all three groups of children. All children focus on whether the individual in question is committed to not eating meat. More specifically, participants condemn a committed individual for eating meat but they do not pass judgment on an uncommitted individual for such behavior. In this sense, children interpret eating meat by an uncommitted individual as similar to

other personal acts; they are unwilling to label the specific act of meat eating as right or wrong (Smetana, 2006; Turiel, 2006).

Although children condemned any individual for breaking his/her commitment not to eat meat, it is important to emphasize that they judged a morally committed individual more severely for eating meat, as compared with a personally committed individual. Like the morally committed vegetarian, participants may have focused on the negative consequences that eating meat has on animals when they judged the morally committed vegetarian. Yet, when participants judged the personally committed vegetarian, they, like the personally committed vegetarian, may have focused on the private and non-interpersonal nature of this broken commitment. Regardless of why participants differentiated in their judgments of a morally and personally committed vegetarian eating meat, breaking a commitment—at least a commitment to abstain from eating meat—appears to be a more or less serious transgression. Children vary in their judgments of a broken commitment depending on the person's reasons for making it.

Research on children's moral development has not specifically addressed the possibility that children might differentiate in their judgments of different types of commitments. However, as shown by the findings of the current study and the study of Mant and Perner (1988), children are more likely to condemn the breaking of commitments that result in negative consequences for others as severe transgressions, whereas they are less likely to condemn the breaking of commitments that do not result in negative consequences for others as such. Participants in the current study altered their judgments of vegetarians eating meat depending on the reason each vegetarian initially vowed not to eat meat, and more specifically, on the extent to which the harmful consequences of the transgression were highlighted. Thus, children's judgments of meat eating depend on two factors. They depend on whether an individual made a commitment to avoid eating meat and also whether this commitment was made for moral or personal reasons.

Children's Judgments of Themselves Eating Meat

Independent vegetarians judged themselves similarly to a morally committed vegetarian for eating meat; they considered it 'very bad' in each case. This equivalence confirms that independent vegetarians hold themselves to the same moral standard as morally committed vegetarians. Furthermore, they judge themselves more severely for eating meat than they do a personally committed vegetarian. Thus, independent vegetarians do not regard their abstinence from meat eating as comparable to that of a personally committed vegetarian.

Family vegetarians displayed a similar pattern of judgment to independent vegetarians. The one exception to this pattern was that they condemned themselves *more* severely for eating meat than an individual who made a moral commitment to abstain from eating meat. A possible explanation for this harsh self-judgment is that these children may anticipate the condemnation that such action would provoke from their own family members.

By contrast, non-vegetarian children judged themselves and the uncommitted individual similarly for eating meat; they considered it 'OK' in each case. This equivalence suggests that non-vegetarian children view their decision to eat meat as being similar to that of an uncommitted individual: it is a personal choice that does not warrant condemnation.

General Discussion

Studies 1 and 2 have uncovered an interesting pattern of findings. All three groups display similar judgments about other people eating meat, including a morally committed vegetarian, a personally committed vegetarian, and an uncommitted individual. Nevertheless, children vary in their judgments of themselves eating meat: whereas non-vegetarian children do not condemn themselves for eating meat (they consider it 'OK'), both groups of vegetarian children disapprove of themselves eating meat (they consider it 'very bad'). Indeed, non-vegetarian children judge themselves similarly to an uncommitted individual for eating meat, whereas vegetarian children judge themselves similarly to a morally committed individual for eating meat. Finally, Study 1 showed that all of the independent vegetarians and approximately half of the family vegetarians abstain from eating meat for moral reasons, discussing the harm or suffering imposed on animals. The explanation offered by these children contrasts with the explanations offered by the non-vegetarian children, who avoid particular types of meat for personal reasons.

Previous research has consistently shown that children judge moral transgressions more severely than social-conventional transgressions and personal choices (Smetana, 2006; Turiel, 2006), just as both groups of vegetarian children judge their own meat eating. Thus, these vegetarian children judge themselves for eating meat just as they would condemn any moral transgression. Conversely, children tend not to judge personal choices (Smetana, 2006; Turiel, 2006), just as non-vegetarian children did not condemn themselves for eating meat. This pattern of findings supports the conclusion that both groups of vegetarian children construe their abstinence from meat as a moral choice, whereas the non-vegetarian children made a personal choice to not eat (certain types of) meat.

The tolerance that these vegetarian children exhibit toward eating meat has interesting similarities to the way that some adults respond to mixed-domain issues, including underage drinking, pre-marital sex, abortion, and even meat eating. Although many adults choose not to engage in such behaviors for moral reasons, they may not actively condemn others for such actions. In fact, Monin (2007) found that vegetarian adults tended to be more tolerant of meat eating than non-vegetarians predicted. The independent vegetarians in this study display a similar tolerance: they themselves abstain from eating meat, but they accept that others are carnivores. In this respect, the independent vegetarians display coherent, consequential behavior, yet they do not impose their moral viewpoint on the choices made by other people.

The non-condemnatory stance of some morally committed individuals raises the possibility that domain theorists need to broaden their definition of the moral domain. Instead of defining all moral transgressions as being universally wrong, moral transgressions could be divided into two categories: (1) wrong for everyone and (2) wrong for the self by virtue of a morally-based commitment. Individuals would categorize actions that they perceive to be morally binding for themselves, but not for others, within the moral domain of the self.

Future Research

There are at least three interesting directions for future research. The present studies focused on children's evaluation of the act of meat eating, as well as straightforward moral, social-conventional, and personal events. It would also be informative to

examine the emotions that children anticipate or experience when eating meat. For example, given that the independent vegetarians in the current studies interpreted meat eating as a moral choice, it is likely that they would anticipate feelings of guilt, alongside feelings of displeasure (or pleasure) after consuming meat. By contrast, it is likely that non-vegetarians would anticipate feelings of pleasure (or displeasure) after eating meat, but not guilt. Such data could provide further evidence that independent vegetarians conceive of meat eating differently from non-vegetarians.

In Studies 1 and 2, children's beliefs about animals, particularly as they relate to meat eating, were not directly examined. Yet it is likely that independent vegetarians hold a distinctive set of beliefs. For example, one independent vegetarian spontaneously asserted that, '... the animals have a right to live'. This comment raises the possibility that independent vegetarians think that animals should have similar rights to humans, whereas non-vegetarians do not. Another independent vegetarian commented, 'I think so many animals have been treated, so, like, poorly when they are kind of caged for meat'. This statement suggests that some independent vegetarians may think that raising animals for meat involves more harm and suffering for animals than do non-vegetarians. Future research could highlight potential differences between the beliefs of independent vegetarians and non-vegetarians by directly asking both groups of children about their beliefs related to animal rights on the one hand and animal suffering on the other.

A final area of research concerns the origin of independent vegetarians' commitment to abstain from eating meat. As noted above, some independent vegetarians voiced their concern for animal welfare. Interestingly, in the course of informal conversation after the experiment, these independent vegetarians acknowledged that they had not directly observed the conditions under which animals are raised and slaughtered, but this issue had been brought to their attention by talking with other people, particularly other children. In future research, it would be informative to ask independent vegetarians, who—if anyone—contributed to their beliefs about vegetarianism, as well as what specific beliefs these individuals shared with them. A good deal of psychological research on moral judgment has focused on children's direct observation of the distress and suffering that moral transgressions such as hitting and stealing cause to the victim (Smetana, 2006; Turiel, 2006). Yet, philosophical analysis has also called attention to the way in which the testimony supplied by other people can come to inform our moral judgments (Jones, 1999). The study of independent vegetarians could provide an important window for studying how an action that is generally seen as a matter of personal choice comes to be regarded, via the influence of other people's testimony, as a matter for moral commitment.

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Appendix

Captions

Susan,¹ the girl in this picture, made a promise not to eat meat because she thinks of animals as her friends and doesn't want to hurt them. [Morally committed vegetarian]

Rachel, the girl in this picture, made a promise not to eat meat because she doesn't like the taste of meat. [Personally committed vegetarian]

Lisa, the girl in this picture, never made a promise not to eat meat. [Uncommitted individual]

The girl in this picture is you. [Participating child herself]

1 Male participants received identical cards about boys named Sam, Roger, and Luke.