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Commitments to help by children: Effects on subsequent prosocial self-attributions

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Children of both sexes and at several ages were or were not induced to make a commitment to help hospitalized children by sorting papers. The commitments occurred under either public or private circumstances. Later, the children discovered that the commitment to help would require that they give up their recess times (i.e. breaks). The willingness of subjects to live up to their commitments and the altruistic self-attributions resulting from those commitments were measured. It was found that, regardless of conditions, virtually all subjects were willing to give up recess time to help. However, their self-attributions differed systematically with condition: only after making a private commitment to help did subjects come to see themselves as more altruistically oriented. Further, this effect appeared earlier for girls than for boys and persisted at least one month after the initial commitment. No such effects occurred for public commitments, suggesting that children as young as eight years were able to discount the self-relevant implications of prosocial commitments made under public scrutiny.

A central tenet within social psychology is that much of human action is governed by a need for consistency (Heider, 1946, 1958; Newcomb, 1953; Festinger, 1957). Nonetheless, although researchers have frequently studied the role of consistency in adults' behaviour, they have seldom examined the questions of when and under what circumstances consistency forces emerge as determinants of human functioning.

In recent years there has been a resurgence of interest in consistency pressures and their role in the influence process (Cialdini *et al.*, 1981; Cooper & Croyle, 1984). However, the body of recent work differs from the earlier work in at least two ways. First, increasing attention is being paid to the ability of consistency pressures to affect behaviours rather than only attitudes or beliefs (e.g. Cooper, 1980; Pallak *et al.*, 1980; Cooper & Axsom, 1982; Frey, 1982).

Secondly, in work related to consistency forces, there is increased awareness of the role of a type of consistency motive quite different from the strain for intrapersonal harmony that concerned early theorists (Heider, 1946; Newcomb, 1953; Festinger, 1957), namely, the desire to *appear* consistent to others (Schlenker, 1980; Baumeister, 1982). According to this perspective, people view consistency as socially desirable and therefore often attempt to be consistent with prior positions and behaviours in order to maintain a positive public image. One implication of this socially approved quality of consistency is that consistency can be seen as occurring for reasons related to external reward. As such, a public setting for consistent behaviours may serve as a discounting cue (Kelley, 1973) for the personal implications of those behaviours. That is, an individual may be unlikely to develop internal self-attributions from consistent actions that were performed under public scrutiny. Although consistency in behaviour has long been seen to be a basis for trait attributions (McArthur, 1972; Kelley, 1973), no data address the possibility that consistency under public surveillance may not lead to relevant self-attributions.

In the study described here, we attempted to incorporate the aforementioned recent developments into an investigation of when and how consistency pressures begin to affect human responding. That is, we examined the question of when and why consistency with an action has an important influence on future action and action-related beliefs. Further, we explored the role of both intrapersonal and interpersonal consistency in the development of

this process. To do this, children's helpfulness was examined in the context of a behavioural compliance tactic designed to increase performance of a request through the use of consistency pressures – the low ball technique.

The low ball technique is a consistency-based compliance procedure known to be widely used in sales (especially car sales) settings (e.g. Carlson, 1973; Consumer Reports, 1974, 1983) and shown experimentally to influence adults' compliance (Cialdini *et al.*, 1978; Burger & Petty, 1981; Brownstein & Katzev, 1985). With this procedure, enhanced compliance with a costly request is produced by first gaining targets' agreement to perform a seemingly mild form of the favour and only then informing targets of the favour's costly features. For example, in one study by Cialdini *et al.* (1978), the low ball procedure was directed at college students who were told of a 7.00 a.m. starting time only after they had agreed to be in a psychology experiment. Upon then learning of the starting time and being given the opportunity to renege, these individuals remained more willing to make an appointment to participate than individuals who had heard of the 7.00 a.m. time from the outset; further, virtually all of the low ball subjects who agreed to participate appeared for the study as promised. Cialdini *et al.* (1978) interpreted these results in terms of subjects' desire for consistency with their earlier verbal commitment.

Although this sort of commitment procedure has been found to be effective with adults, investigators have not examined when and under what conditions it becomes functional for children nor what its self-attributional consequences might be. However, it is unlikely that increased behavioural or attributional consistency with a prior commitment (e.g. to help) occurs much before the age of seven or eight years. This statement is based on three bodies of research.

First, children younger than seven years apparently have not developed the tendency to perceive their prior behaviours as predictive of their future behaviours. For example, very young children do not seem to use data regarding prior success or failure to draw inferences about their own capabilities (Ruble *et al.*, 1976; Nicholls, 1979). Thus, one would not expect children much younger than age 7–8 to feel the need to act in ways that are consistent with prior behaviour because they do not seem to evaluate their present behaviour in light of past behaviour.

Second, children younger than 7–8 years of age seem to be much less likely than older persons to make predictions regarding others' future behaviour on the basis of information about prior behaviour (e.g. Rotenberg, 1982; Dix & Grusec, 1983; Rholes & Ruble, 1984), although younger children, especially girls, may have some limited ability to do so (Heller & Berndt, 1981; Berndt & Heller, 1986). Thus, young children should be relatively unlikely to understand the notion that their current or prior behaviour will be viewed as predictive of future behaviour, and should not view themselves in terms of having stable traits.

Third, researchers have found that labelling an elementary school-aged child in a given manner (e.g. as generous) results in attempts to behave in a manner consistent with the adult's attribution (e.g. Miller *et al.*, 1975; Jensen & Moore, 1977; Grusec *et al.*, 1978); however, Grusec & Redler (1980) found such labelling procedures to be effective with eight- and 10-year-olds, but not five-year-olds. This finding also is congruent with the view that young children do not think in terms of enduring dispositional traits and therefore should not be susceptible to consistency pressures associated with earlier trait-relevant actions.

To provide evidence regarding the emergence of commitments as mechanisms for influencing the likelihood of a specified behaviour and behaviour-related beliefs, we examined the susceptibility of children at four ages to the low ball technique. Furthermore, we compared the effectiveness of public vs. private forms of commitment at the different ages. Specifically, children who had agreed privately, agreed publicly, or had not agreed to perform a seemingly low-cost helping activity (sorting coloured paper for hospitalized

children) then learned that the activity would have to be performed during their recess times (i.e. breaks). The willingness of children to schedule such recess time and to perceive themselves as other-oriented (altruistic) rather than egoistic in the future were the primary dependent variables. In addition, measures were taken of three factors deemed likely to be related to the motive to be consistent with one's commitments: the perception that consistency is socially approved by adults, the internalized preference for consistency, and the cognitive understanding of consistent behavioural dispositions (i.e. traits) in people.

Our predictions were different for our two dependent measures – behavioural consistency and self-attributional consistency with the induced commitment. That is, we expected the prior commitment to produce consistent behaviour (increased likelihood of helping) beginning at the third grade for both public and private forms of that prior commitment. This prediction was based on evidence of pressures for both public and private behavioural consistency in children as young as eight years (e.g. Lepper, 1973; Grusec & Redler, 1980). However, we expected that the prior commitment would lead to consistent (i.e. altruistic) self-attributions only when that prior commitment had been privately made. This prediction was based on evidence that, beginning around the third grade, children are able to use discounting cues when forming their attributions (see Eisenberg, 1986, for a review) and on our speculation that adult scrutiny of a commitment would serve as a cue to activate discounting of internal (i.e. altruistic) motivations.

Method

Subjects

Participants were first (32 males, 26 females; mean age = 80 months), third (17 males, 27 females; mean age = 104 months) and sixth (40 males, 39 females; mean age = 138 months) graders from two elementary schools, and seventh and eighth graders (22 males, 26 females; mean age = 161 months) from a junior high school in the same middle- to upper middle-class school district.

Procedure

Each child participated individually in two sessions in an area near his/her classroom and, as a part of a group, in a third session. Sessions 1 and 2 were a mean of 18–24 days apart (depending on grade level). Sessions 2 and 3 were a mean of 30–33 days apart for the elementary schoolchildren; due to scheduling constraints, sessions 2 and 3 were a mean of only seven days apart for the junior high students. (The unequal interval time between sessions 2 and 3 for the different age groups had the potential to influence age effects in our data. However, condition or gender effects were not affected.) Experimenters were six adult females. To avoid the possibility of experimenter bias, for each child the experimenter for session 2 was different from the one for session 1 and blind to the subject's responses in session 1. The experimenter administering session 3 was varied randomly.

Session 1 (preliminary measures). Each child completed a battery of three scales in the first session: (*a*) the Self/Adult Preference for Consistency Scale, which assessed the children's personal preference for consistent behaviour and children's perception that adults prefer consistent behaviour; (*b*) the Cognitive Understanding of Traits Scale, which was based on procedures developed by Rotenberg (1982) to assess a child's perception of behavioural dispositions as stable over time and situations; and (*c*) 10 items from the Crandall *et al.* (1965) Social Desirability Scale designed for use with children. The presentation order of the Self/Adult Preference for Consistency Scale and the Cognitive Understanding of Traits Scale was randomly determined prior to the session; the Social Desirability Scale was always presented after the Consistency Scale. At the session's end, children were allowed to select from a variety of small prizes as a reward for their participation. The prize was put in a brown sack with the child's name on it and was held for the children until all children had participated in session 1 but before any had participated in session 2.

The Self/Adult Preference for Consistency Scale (henceforth called the Consistency Scale) consisted of four vignettes, each describing (with accompanying line drawings) two characters of the same sex as the

child, one of whom behaved in a consistent manner and one who behaved inconsistently (e.g. two children tell their mother they want to go to the movies on Saturday but one later decides he or she wants to watch TV). After ensuring that the child had correctly identified the character whose behaviour changed, the experimenter asked the child to indicate which child was better. Next, children were asked to evaluate that character's behaviour on a four-point scale (varying from 'a little bit better' to 'not at all better') either according to adults' (teachers' and parents') preferences or his/her own preferences (henceforth called adult or self-consistency indices). Children were trained to indicate their responses by pointing to pre-labelled columns of chequers varying in height from low (to indicate 'a little bit better') to high ('very much better'). Three features were counterbalanced through the presentation of this measure: which two vignettes concerned adults' (vs. one's own) preferences for consistency, whether the consistent or inconsistent character was asked about first, and the order of the vignettes.

The Cognitive Understanding of Traits Scale consisted of four vignettes with accompanying line drawings adapted from Rotenberg (1982) in which the consistently kind or mean behaviour of a main character in a pair of settings was described (i.e. the child acted either mean or kind twice). After ensuring that the children understood the story, the experimenter asked them to indicate if the main character was kind or not kind (mean or not mean). Next the child was asked to indicate on a five-point scale (using the columns) how sure he/she was that the protagonist was kind (or mean) (1 = not at all sure; 5 = very, very sure; henceforth called the concurrent score). After that, the children were told to imagine that seven days had gone by and to rate the main character's disposition once again (children were shown pictures of seven sunsets to illustrate this point; henceforth called the future score). Finally, children were asked to predict the behaviour of the main character in two new hypothetical situations in which kind vs. mean behaviour were the choice [i.e. the story protagonist could (*a*) either take ice cream from a younger child or buy his/her own, and (*b*) either help another child who dropped his/her things or walk by]. The child indicated if the protagonist would act mean or nice and how sure he/she was (henceforth called the predictions score). Two features were counterbalanced: whether kind or mean stories were presented first, and whether the dispositional response options began with the presence of the trait, kind (or mean), or with the absence of the trait, not kind (or not mean). Responses were summed across vignettes.

The Social Desirability Scale consisted of 10 items that were read to each child and to which the subject responded either 'yes' or 'no'. Seven of the 10 concerned prosocial behaviour.

Session 2 (experimental manipulation and commitment-related action measure). After a child was brought to the experimental area from the classroom, the experimenter inquired as to whether the child was aware of any of the experimental procedures via classmates. The child was seated at a table supporting one large stack of papers thoroughly intermixed in terms of four paper colours as well as four smaller stacks each containing papers of only one of the colours. The experimenter explained that the papers in the large stack needed to be separated into the colour-coded smaller stacks for use by hospitalized children in art projects and games and that the child could help if he or she wished. After a brief demonstration of how to sort the papers, the experimenter deliberately implied that the helping task would take place during the research session, 'the sorting can be done right here at this table'. Depending on the experimental condition to which children had been randomly assigned previously, the following occurred.

Public commitment. The experimenter said, 'If you are willing to help the children in the hospital by sorting the coloured paper into piles, just write yes on this chalkboard [a hand-sized board and chalk were provided]; but if you don't want to help the children by sorting the coloured paper, then, just write no.' If a child declined to help, he or she was thanked and returned to class. If a child agreed to help, he or she was told that the sorting would have to be done during recess (or lunch for the older students, who did not have recess) time. Children were then asked, 'Now that you know that you'll have to give up your recess/lunch time to sort paper for the sick children, do you want to do it?' They then were asked to indicate the number of days they would be willing to sort papers by placing Xs on a calendar depicting the next 10 school days. After so responding, children were asked not to speak about the experiment to classmates and were escorted back to class.*

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*Prior to their return to class, children were asked to guess the number of beans in a large jar and were told the correct number. This procedure was intended to detect the amount of information subsequent subjects may have received about the experiment from their previously tested classmates. If any child had been able to guess the number of beans correctly, it would be presumed that there had been information leakage. There were no correct estimates.

Private commitment. The experimenter said, 'If you are willing to help the children in the hospital, just write "yes" on this board here; if you don't want to help, just write "no". But whatever you write, don't tell me or show me. This is your secret.' At this point the procedures continued as in the public commitment condition.

Control. The experimenter told the child about the recess/lunch time feature of the task without eliciting any form of commitment from them and proceeded directly to the calendar (helping) question.

Data from session 2 were not available for 11 children who were absent or had moved residences.

Session 3. All children except first graders, for whom the scale was deemed too difficult, were administered the moral attribution questionnaire in group sessions (mean with complete data = 133). This measure was slightly adapted from that of Silbereisen *et al.* (1986). It included four vignettes about situations in which the child himself/herself was described as assisting another (e.g. helping a new student with difficult maths problems, or helping one's mother with grocery shopping). Each vignette was followed by six possible reasons for assisting, each of which the child rated as applying to himself/herself on a five-point scale (from 'quite surely' to 'not at all'). Five were taken directly from Silbereisen *et al.* (1986); one additional response reflecting other-oriented empathic motives (e.g. 'The new student would be less worried and more at home in the class') was added to each scenario (because we did not feel comfortable with Silbereisen *et al.*'s prosocial response choices). The two response choices reflecting self-oriented, hedonistic motives and the one reflecting other-oriented motives were used in this study. This is because these types of reasons have been consistently related to behaviour in the moral reasoning research conducted with children (cf. Eisenberg, 1986).

This questionnaire was read aloud to the elementary schoolchildren and experimenters were present to answer any questions during its administration.

Because some children tended to exhibit a response set when using the rating scales on the self-attribution questionnaire, the child's ratings for each tpe of response were standardized in relation to their average scale rating (i.e. in relation to the child's average rating for the items). Then the child's ratings for the two self-oriented items were summed.

Achievement test scores. Because (*a*) the understanding of trait consistency is believed to be a cognitive achievement acquired with age and (*b*) self-attributions and helping behaviour could vary as a function of intelligence, scores (normalized percentile scores) on the Iowa Tests of Basic Skills were obtained from the school district for children who took the tests and for whom we received parental permission to use the test scores.

Results

Descriptive statistics for predictor variables

Each of the three indices of understanding of trait consistency was composed of four items. Given the small number of items in each scale, the alpha coefficients for the scales – 0·67, 0·73 and 0·72 for concurrent, future and prediction scores – are acceptable. According to a 2 (sex) × 4 (grade) MANOVA, only the main effect for grade was significant for the three indices (Pillais $F = 6{\cdot}10$, d.f. = 9, 663, $P < 0{\cdot}001$). The univariate Fs for future and prediction scores were significant ($F = 14{\cdot}90$ and $17{\cdot}10$, d.f. = 3, 221, Ps $< 0{\cdot}001$), respectively. According to *post hoc* Newman–Keuls tests ($P < 0{\cdot}05$), first graders' prediction scores reflected fewer trait inferences than did those in each of the higher grades (for both future and prediction scores); third graders scored lower than sixth graders and junior high students on prediction scores; and sixth graders scored lower than junior high students on prediction scores.

There were only two items concerning adults' desire for consistency and the subject's own desire for consistency scores. These were combined for each (alpha for the two items = 0·43 and 0·39 for adult and self-consistency, respectively; the alpha for the four-item combined consistency scale was 0·60). According to a 2 (sex) × 4 (grade) MANOVA, there were no multivariate effects.

Helping behaviour

The effects of sex, grade and experimental manipulation on children's volunteering to hel (i.e. whether they volunteered to sort papers and how many recess days were volunteerec were examined with a 2 × 4 × 3 unique sums of squares MANOVA. Only the main effec sex was significant ($F = 5{\cdot}75$, d.f. = 1, 194, $P < 0{\cdot}017$). Girls volunteered more often (89 per cent) and more days ($\bar{X} = 3{\cdot}93$) than did boys (77 per cent and $\bar{X} = 2{\cdot}77$). Of the tw helping measures, the one of most relevance to our investigation of consistency with an earlier commitment to help was the dichotomous measure of whether or not subjects agre to give up at least one recess day. Unfortunately, the levels of such agreement were so hig experiment-wide (81 per cent) that a ceiling effect was created. That is, in the control conditions in which no prior commitment had occurred, 84 per cent of the subjects volunteered to give up some recess time, creating a helping ceiling effect that the experimental conditions seemingly could not overcome.

Moral self-attributions

A 2 (sex) × 4 (grade) × 3 (condition) unique sums of squares MANOVA was computed t examine the effect of the experimental manipulation on moral self-attributions. Although there was no significant effect of condition on volunteering to help immediately after the experimental manipulation, there was a significant multivariate effect of condition on self-attributions (multivariate $F = 2{\cdot}63$, d.f. = 4, 230, $P < 0{\cdot}035$); moreover, the effect of sex was significant ($F = 6{\cdot}89$, d.f. = 2, 114, $P < 0{\cdot}002$), and the sex × condition × grade interaction was marginally significant ($F = 1{\cdot}68$, d.f. = 8, 230, $P < 0{\cdot}10$). The univariate Fs for condition, sex and the three-way interaction were significant for other-oriented self-attributions ($F = 4{\cdot}30$, d.f. = 2, 115, $P < 0{\cdot}016$; $F = 4{\cdot}34$, d.f. = 1, 115 $P < 0{\cdot}039$; and $F = 2{\cdot}76$, d.f. = 4, 115, $P < 0{\cdot}03$, respectively); only the effect of sex was significant for hedonistic self-attributions ($F = 13{\cdot}18$, d.f. = 1, 115, $P < 0{\cdot}001$). Girls verbalized more other-oriented ($\bar{X} = 0{\cdot}93$) and fewer hedonistic ($\bar{X} = -0{\cdot}41$) self-attributions than did boys ($\bar{X}$s = 0·77 and −0·17, respectively).

The means for other-oriented attributions presented in Table 1 indicate that the three-wa interaction was due primarily to the fact that (*a*) other-oriented attributions occurred more frequently in the private condition ($\bar{X} = 1{\cdot}01$) than in either the public ($\bar{X} = 0{\cdot}751$) or control ($\bar{X} = 0{\cdot}751$) conditions, Ps > 0·05 by Newman–Keuls tests, and (*b*) this tendency fo

Table 1. Mean other-oriented (altruistic) self-attributions

Condition/grade	Male	Female	Grand $\bar{X}$
Control			
3 (6)	0·62 (6)	0·78 (9)	
6	0·68 (10)	0·76 (8)	0·75 (41)
7–8	0·65 (2)	0·96 (6)	
Public			
3	0·85 (4)	0·68 (6)	
6	0·50 (11)	0·97 (11)	0·79 (44)
7–8	1·07 (4)	0·92 (8)	
Private			
3	0·54 (5)	1·19 (8)	
6	1·07 (9)	0·99 (10)	1·01 (48)
7–8	1·05 (8)	1·03 (8)	
Grand $\bar{X}$	0·77 (59)	0·93 (74)	0·86 (143)

Note. Cell *n*s are in parentheses.

private commitment subjects to make other-oriented self-attributions occurred earlier in girls than in boys: means for third, sixth and junior high girls were 1·19, 0·99 and 1·03 whereas for boys these means were 0·54, 1·07 and 1·05. Tests of simple effects for the interaction of sex × grade within condition were significant only in the private condition ($F = 4·95$, d.f. = 2, 4, $P < 0·012$).

Because scores on social desirability and academic tests were positively related to needs-oriented self-attributions, the univariate analyses were recomputed controlling for each of these variables (in separate analyses). The pattern of results was virtually identical to that for the ANOVA reported previously when SD scores were covaried from the analyses. When achievement test scores were covaried, the main effect for sex and the three-way interaction for needs-oriented attributions were no longer significant, whereas the main effect for condition was. These findings suggest that cognitive processes or the motivation to perform well mediated, in part, the gender difference in self-attributions and in the age-related shift in the effect of the manipulations on self-attributions.

Additional multivariate analyses were performed in which the effects on the indices of understanding and trait consistency and belief in consistency on self-attributions were examined (they were entered as continuous predictor variables in separate MANCOVAs). There were no significant effects for any variable except adult consistency. The results for the latter variable were very complex (i.e. involved two three-way interactions) and were not interpretable. Finally, it should be noted that the amount of helping was unrelated to self-attributions in grades 3 and 6, but was negatively related to hedonistic self-attributions (partial $r = -0·58$, d.f. = 34, $P < 0·001$) and positively related to other-oriented self-attributions ($r = 0·35$, d.f. = 34, $P < 0·037$) for the junior high students.

Discussion

One principal result of our study was that, at ages as young as eight years, children who were induced to make a private commitment to help reported more altruistic (other-oriented) self-attributions than did children who made a public commitment or no commitment. Furthermore, this effect on self-attributions was measurable as much as a month after the commitment. This finding provides initial support for the assumption that, at relatively young ages, making a private commitment to a given course of action affects persisting self-attributions in a manner consistent with that course of action. Additionally, our data showed no comparable effects for publicly made commitments, suggesting that children at the ages of our subjects were able to discount the self-implications of commitments made under public scrutiny.

There also was evidence to support the hypothesis that the effects of internal consistency pressures differ with sex and age. Due to the fact that the measure of self-attributions was too difficult for the youngest children in the study, we had data concerning self-attribution only for children in grades 3, 6 and junior high. Nonetheless, there was evidence that for girls, but not boys, the self-attributional effects of making a private commitment were already in place by grade 3; for boys, this effect did not appear in our data until grade 6.

It is provocative that the commitment manipulation did not affect behaviour in the immediate situation even though it did apparently affect subsequent self-attributions. A straightforward interpretation of this pattern is that mentioned earlier: because of extremely high levels of helping in the control conditions (84 per cent), it was not possible to note the effects of the prior commitments upon such aid. One other possible explanation for this pattern of findings is that the effect of the commitment manipulation on helping was weak because it takes time for self-attributions based upon consistency pressures to consolidate. The request for helping immediately followed the commitment manipulation, thereby leaving

virtually no time for children to consider the implications of their initial commitment. This possibility is in keeping with some evidence from another consistency-based compliance technique, the foot-in-the-door procedure, indicating that the technique is more effective when a delay is interposed between an initial action and a request to perform consistently with that action (Beaman *et al.*, 1983).

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