

Views on the Efficacy and Ethics of Punishment: Results from a National Survey

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Abstract

Punishment-based interventions are among the most controversial treatments in the applied behavior analysis literature. The controversy concerns both the efficacy and the ethics of punishment. Five hundred randomly selected members of the Association for Behavior Analysis were sent a survey concerning their views on the efficacy and ethics of punishment. Respondents were asked to agree or disagree with statements about punishment using a six-point Likert-style scale, and to answer several open-ended questions. Respondents exhibited marked variability in their attitudes toward punishment, but on several points, opinions appeared to converge. Demographic variables were found to relate to attitudes, and views on the efficacy of punishment predicted views on its ethical status. Implications of these findings for future research and applied practice are discussed.

Keywords: Punishment, aversive interventions, aversive control, behavior analysis

Punishment is typically defined as a reduction in behavior due to a consequence made contingent on the performance of that behavior (Azrin & Holz, 1966). The consequence can be the introduction of an aversive stimulus (i.e., positive punishment) such as electric shock, loud noise, a reprimand, etc., or the removal of a reinforcing stimulus (i.e., negative punishment) such as food, money, or access to the social environment. Punishment-based strategies developed for clinical use include overcorrection, time-out, response cost, visual screening, and many more (Axelrod & Apsche, 1983; Conyers et al., 2004).

Punishment-based interventions are among the most controversial treatments for behavior disorders in the applied behavior analysis literature (e.g., Johnston, 1991; Matson & Kazdin, 1981; Repp & Singh, 1990). The controversy is actually double, concerning both the efficacy and the ethics of punishment, and both researchers and practitioners tend to argue for or against the morality of punishment by developing a position on its efficacy. Some scholars (e.g., LaVigna & Donnellan, 1986) have argued that punishment is unnecessary, claiming that reinforcement-based strategies provide the efficacy of punishment without harmful side effects, thereby making punishment unethical. Alternatively, other scholars (e.g., Axelrod, 1990; Foxx, 2005) have argued that punishment, especially when used in conjunction with reinforcement, has efficacy superior to that of reinforcement alone, making punishment at least sometimes ethical.

Controversy over punishment has led to dozens of position papers (see chapters in Repp & Singh, 1990), as well as debates over the legality of aversive stimuli (Lohrmann-O'Rourke & Zirkel, 1998), the long-term effects of punishment-based discipline (Benjet & Kazdin, 2003), and even the interpretation of B. F. Skinner's position on punishment (Dinsmoor, 1992). However, despite frequent comments about the diversity of opinion on the ethics and efficacy of punishment, no empirical research has focused on this diversity itself. That is, no systematic survey has examined attitudes toward punishment in a representative sample of the general public, professionals in the field of behavior analysis, or psychologists in general. Without such data, it is difficult to assess whether either side in the punishment debate constitutes a mainstream view or a radical one.

Although no general survey exists, there has been a small amount of research on attitudes toward punishment among professionals who work with individuals with disabilities. Irvin and Lunderworld (1988) asked special education teachers to rate various punishment procedures on four dimensions:

restrictiveness, intrusiveness, acceptability, and efficacy. These investigators found that teachers' perceptions of efficacy was closely related to acceptability but not to restrictiveness or intrusiveness, suggesting that these participants were able to separate their judgments of efficacy from other judgments that focused more on the ethics of punishment procedures.

Harris, Handleman, Gill, and Fong (1991) conducted a related study investigating the relationship between use of aversives and job satisfaction in a sample of direct care staff working in programs serving individuals with autism. Harris and colleagues divided participants into two groups, depending on whether the participants' programs permitted the use of "strong aversives," and found that participants who were permitted to use strong aversives had a greater sense of personal accomplishment in their work. This finding, taken in the context of other results, suggested that giving staff a fuller range of treatment strategies increases a sense of satisfaction and control in one's work and prevents the burnout so common in clinical work.

Research on service providers has recently been supplemented by studies investigating perceptions of punishment among typically developing children. In a representative study, Brinker, Goldstein, and Tisak (2003) described six different punishment strategies to third- and fifth-graders. Perhaps surprisingly, positive punishment strategies were generally viewed as more acceptable and also more effective than negative punishment strategies. Furthermore, children in the study reported their teachers using positive punishment far more than negative punishment. Integrating the results of this study with those of Irvin and Lundervold (1988), teachers appear to select punishment-based interventions on the basis of what works, even if they are unable or unwilling to support these selections by referring to scientific principles (see also Evans, Galyer, & Smith, 2001).

Despite research suggesting that common punishment procedures are seen by both users *and* potential recipients as more effective and ethical than some scholars have argued, no survey has attempted to extend these findings to a large sample. In the present study, we have done precisely this, asking a large, national sample of behavior analysis professionals about their opinions on the ethics and efficacy of punishment.

Method

Participants

A total of 500 randomly selected individuals from the 2004 online membership directory of the Association for Behavior Analysis (ABA) served as the potential pool of participants for this investigation. A stratified sampling procedure was employed such that the selected sample matched the proportion of the ABA members from each of the 50 states of the United States. Potential participants were sent a survey and asked to return a hard copy using a stamped envelope provided.

Instrumentation

To assess ABA members' views on the ethics and efficacy of punishment, a 30-item questionnaire designed by the authors was used. The first section of the questionnaire required respondents to provide demographic information, their employment setting, number of years in the field of behavior analysis, and any certifications or licensures obtained. The next section of the questionnaire asked respondents to agree or disagree with 17 statements about punishment, using a 6-point Likert-style scale ranging from "strongly disagree" to "strongly agree." Of these statements, five concerned ethics, five concerned efficacy, and the remaining seven either tested participants' knowledge about punishment policies or were used to detect random or inconsistent responding across other items. The third section of the questionnaire asked participants several open-ended questions regarding the types of punishers (if

any) used in their work, which types of behavior problems punishers are used for, and how receptive participants believe their colleagues, their clients' families, and the field of applied behavior analysis in general to be regarding punishment procedures. The present paper focuses on the 10 items that asked participants' about their views concerning the ethics and efficacy of punishment.

Procedures

The Institutional Review Board of Syracuse University reviewed and approved the research procedures employed in this study in summer of 2004. In the fall of 2004, the questionnaire and self-addressed stamped return envelope were mailed to each participant. All participants were also sent a cover letter explaining the purpose of the survey and requesting confidential participation. A re-mailing of the survey was conducted in spring 2005, with a second copy of the survey being sent to all members of the sample who had not returned the initial copy.

Results

Demographics of Sample

Of the 500 participants surveyed, 21 surveys (4%) were returned as undeliverable due to address problems; therefore, the response rate was determined based on the remaining 479 surveys. Of the remaining surveys, 147 (30.7%) were returned. However, six (1.3%) surveys were unusable (e.g., the respondent indicated that he or she did not feel knowledgeable enough regarding punishment) yielding a total of 141 (29.4%) surveys available for the final analysis.

A diverse set of respondents completed and returned the survey. There were considerably more female respondents ($N = 85$; 60%) than male respondents ($N = 56$; 40%). The most frequent work setting of respondents was a university (28%), followed by a school (26%), private practice (13%), a hospital (8%), and a residential facility (8%). Respondents had worked in the field of applied behavior analysis for an average of 12 years ($SD = 10$ years). In addition, 36% of respondents held either a Board Certified Behavior Analyst (BCBA) or Board Certified Associate Behavior Analyst (BCABA) credential, and 18% of respondents were licensed psychologists.

Descriptive Statistics

Views on the efficacy of punishment. Five of the 17 items on the second part of the survey asked respondents about their views concerning the efficacy of punishment. Table 1 shows the data for these items. Generally speaking, respondents viewed punishment procedures as less effective than positive reinforcement techniques. For example, the mean response was between "slightly agree" to "agree" for the following statements: that punishment has more negative side effects than positive reinforcement ($M = 4.8$), and that positive reinforcement is more effective than punishment ($M = 4.2$). However, participants were also likely to agree ($M = 4.5$) that aversive components are embedded in supposedly non-aversive procedures.

Table 1

Views on the Efficacy of Punishment

Statement	Mean	Median	SD
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Nonaversive procedures are now available to treat all behavior disorders.	3.6	4	1.7
Positive reinforcement is more effective than punishment at changing behavior.	4.2	4	1.7
Punishment has more negative side effects than positive reinforcement.	4.8	5	1.3
Many supposedly nonaversive procedures actually have components that rely on aversive control.	4.5	5	1.1
It is more difficult to make conditioned punishers than conditioned reinforcers.	2.6	2	1.2

Views on the ethics of punishment. Five of the 17 questions asked respondents about their views concerning the ethics of punishment. These data are summarized in Table 2. Item means indicated that respondents generally agreed that punishment should be reserved for behaviors that pose a danger to the individual or others ($M = 4.9$). Further, respondents generally disagreed with the claim that punishment is ethical as long as the punishment procedure is approved by a behavior management committee and/or consent is obtained ($M = 2.5$). Finally, a mean rating of 4.1 (slight agreement) was found for the item indicating that a stimulus avoidance assessment must be conducted prior to the use of a punishment procedure.

Table 2
Views on the Ethics of Punishment

Statement	Mean	Median	SD
Punishment should be reserved for behaviors that pose a danger to the individual or others.	4.9	5	1.4
As long as the behavior management committee approves of a proposed punishment procedure, it is ethical to implement it.	2.5	2	1.3
Punishment is appropriate as long as consent is obtained.	2.5	2	1.2
Ethically, a stimulus avoidance assessment must be conducted prior to the use of a punishment procedure.	4.1	4	1.3
It is ethical for staff to rely on the one-time use of punishment if a temporary situation requires the use of aversive stimuli.	3.2	3	1.4

Inferential Statistics

Several analyses were conducted to determine the relationship between demographic variables and attitudes toward punishment. For these analyses, respondents' ratings were summed across the five ethics items and the five efficacy items to create a composite score for each area, with some items being reverse-scored, when appropriate. An independent-groups t-test found that male respondents reported significantly more positive overall attitudes concerning the ethics of punishment than did female respondents, $t(135) = 2.1, p < .05$. A similar analysis did not find a significant gender difference in efficacy opinions, $t(135) = .88, p = .38$. Correlational analyses found a small but statistically significant relationship between respondents' years of work experience and positive attitudes toward the efficacy of punishment, $r = .18, p < .05$. However, work experience did not relate to attitudes toward the ethics of punishment, $r = .08, p = .36$. Finally, efficacy ratings substantially and positively correlated with views on ethics ($r = .41, p < .01$), suggesting a degree of consistency between the two attitudes.

Discussion

The purpose of the present study was to ask a national sample of members of a professional behavior analysis organization their views on the ethics and efficacy of punishment. Generally, respondents indicated that (1) consent and administrative approval are not enough to make punishment procedures ethical, (2) punishment should be reserved for more dangerous behaviors, (3) punishment procedures have more negative side effects and are less effective than reinforcement procedures, (4) aversive components are embedded in many supposedly non-aversive procedures, and (5) efficacy beliefs were positively correlated with ethics beliefs. Despite having similar views regarding the efficacy of punishment, men's views regarding the ethics of punishment were more favorable than those of women.

Perhaps the first conclusion worth emphasizing is that the range of opinion among respondents was very large, suggesting that any statements in both the popular media and professional publications claiming that "professionals" think punishment to be ineffective or unethical (or, for that matter, effective or ethical) are not credible. A second general point involves punishment research, or the lack of it—for an issue that generates such heated controversy, we have very little empirical research to guide us, compared to the evidence base for reinforcement. Given recent findings that interventions containing aversive components may be more effective than interventions without punishment in certain circumstances and that individuals have demonstrated preference for these interventions over non-aversive options (Hanley, Piazza, Fisher, & Maglieri, 2005), empirical investigations are warranted. In the past several years, several commentators have called for more research on punishment (e.g., Lerman & Vorndran, 2002) and aversive control (e.g., Critchfield, 2006; Perone, 2003), and based on the findings of the present survey, we would echo that call.

Limitations

There are several limitations that are worthy of note. First, the response rate was relatively low (29.4%). Since a large portion of the participant pool failed to respond, it is not known the extent to which our sample was representative. It is possible that the present findings would be altered if the response rate was higher. Additionally, this survey targeted members of the Association for Behavior Analysis (ABA); therefore, these findings may not generalize to behavior analysts who were not current members of ABA at the time the participant directory was accessed. Finally, despite being members of ABA and, presumably, having knowledge regarding the definition of punishment, respondents may have rated items using differing definitions and/or had variable understanding of the terminology used. For example, respondents may not have had experience with stimulus avoidance assessments.

Future Research Directions

Future research may wish to examine attitudes toward different specified punishment procedures rather than punishment in general. Perhaps there are differences related to the use of positive punishment (e.g., presentation of noxious stimuli) as opposed to negative punishment (i.e., time-out). In addition, it may be interesting to note whether behavior analysts (and other professionals) have similar views toward negative reinforcement and the use of punishment. Finally, rather than examine attitudes in the abstract, future investigators could construct ecologically valid vignettes and request respondents to indicate their views using these survey stimuli.

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