Differential Attrition Rates and Active Parental Consent

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Eval Rev 1999; 23; 316
DOI: 10.1177/0193841X9902300304

Active parental consent in survey research poses ethical and practical concerns. One common argument against the requirement of active consent procedures is its effect on participation rates. There is additional concern that higher risk groups may be underrepresented in the final sample. Empirical support of differential attrition, however, is lacking. In the current multisite longitudinal study, passive consent procedures were approved for the collection of pretest data. For subsequent years of data collection, active parental consent procedures were required. In this article, we use the pretest data to examine demographic, attitudinal, and behavioral differences between those students for whom active consent was provided and those for whom active consent was either denied or for whom no response was received. The results indicate that active consent procedures produce deleterious effects on participation rates and lead to an underrepresentation of at-risk youth in the sample.

DIFFERENTIAL ATTRITION RATES AND ACTIVE PARENTAL CONSENT

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The ethical treatment of study participants is a primary concern for social science researchers, and a vital element of this ethical consideration is participant informed consent. According to current practices and guidelines

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AUTHORS' NOTE: *Earlier versions of this article were presented at the 1997 Annual Meeting of the American Evaluation Association and the 1997 Annual Meeting of American Society of Criminology. This research is supported under Award Number 94-IJ-CX-0058 from the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice. Points of view in this document are those of the authors and do not necessarily represent the official position of the U.S. Department of Justice. Address correspondence to Finn-Aage Esbensen, Department of Criminal Justice, 1100 Neihardt, University of Nebraska, Lincoln, NE 68588-0630; phone (office): 402-472-6383; phone (home): 402-489-4993; fax: 402-472-6758; e-mail: esbensen@unlinfo.unl.edu.*

EVALUATION REVIEW, Vol. 23 No. 3, June 1999 316-335

governing research on human subjects, participants must provide informed consent. This involves providing potential participants with the following information: an explanation of the research design and the study's intended purpose, expected risks or benefits to the participants, expectations placed on participants, identification of the researchers and of any sponsoring or funding agencies, the right to refuse participation partially or entirely, and the willingness of the researchers to answer any questions concerning procedures.

Research involving minors poses a unique set of considerations and problems, specifically with respect to obtaining informed consent for study participation. In this article, we explore the effects of requiring active parental consent for middle-school students participating in a survey research project. With minors, who provides this consent? Is it sufficient to obtain consent from the child, or must parents or guardians also be contacted for permission? In school-based research, can teachers or school representatives provide consent under "in loco parentis?"

Two different approaches to informed consent are common to survey research involving minors. Passive parental consent is a procedure that requires parents of subjects to respond only if they do not want their child to participate in a research project. This process assumes that a nonresponse is an affirmative response; the parents fail to return a refusal form because they are willing to have their child participate. Active parental consent, on the other hand, requires all parents to return a consent form, regardless of whether they are willing to allow their child to participate. Under this procedure, the assumption is that a nonresponse is a refusal, not the result of inertia or apathy.

During the past decade, an increasing number of school districts have adopted policies requiring active parental consent for survey participation. What effects do such requirements have on participation rates, sample representativeness, and costs of the research? Social science researchers are confronted with problems of sample representativeness and selective loss (e.g., Groves 1989; Hindelang, Hirschi, and Weiss 1981; Pottick and Lerman 1991; Singleton, Straits, and Straits 1993). The requirement of active parental consent in school-based surveys adds another dimension to this general methodological issue. Whereas others have discussed ethical issues associated with informed consent (Diener and Crandall 1978; Severson and Biglan 1989), our objective in this article is to focus on the practical and research-specific issues associated with active parental consent procedures.

ACTIVE VERSUS PASSIVE CONSENT: RESPONSE RATES

It has been widely documented that passive consent procedures tend to produce higher participation rates than do active consent procedures (Biglan et al. 1987; Donovan, Jessor, and Costa 1988; Ellickson and Hawes 1989; Esbensen et al. 1996; Lueptow et al. 1977; Severson and Biglan 1989; Murray et al. 1987). Low response rates and sample bias under active consent procedures have been persistent problems. Although these methodological concerns can be reduced through researchers' efforts and diligence, the cost and personnel efforts required are prohibitive to many, if not most, research endeavors. In spite of researcher diligence, written (active) parental consent has been found to reduce overall participation rates, generally to a range of 40% to 60% (e.g., Donovan, Jessor, and Costa 1988; Lueptow et al. 1977; Severson and Biglan 1989; Severson and Ary 1983). In sharp contrast, passive consent procedures can secure response rates from 80% to 100% (e.g., Ellickson and Hawes 1989; Esbensen et al. 1996; Kearney et al. 1983; Landis and Janes 1995; Lueptow et al. 1977; McBride et al. 1995; Murray and Hannan 1990; Severson and Biglan 1989; Weeks et al. 1995).

Two studies represent the range of effects of active consent procedures. In one relatively recent study, MacGregor and McNamara (1995) compared return rates using two different procedures. One group of middle-school students was instructed to return consent forms to the main office; the other group was provided with preaddressed stamped envelopes. After two distributions, a return rate of only 10.9% had been achieved, with a significantly higher rate among the mail group. Representative of the other extreme, Ellickson and Hawes (1989) examined refusal rates associated with active and passive consent procedures in two schools. In the school requiring passive consent, 93% of the students participated, compared to 86% in the school requiring active consent. Achieving this 86% completion rate for the active consent procedure, however, was both costly and time consuming. In addition to three mailings over the course of 4 weeks, the researchers made two telephone follow-up calls to nonrespondents and held two special parent meetings, and teachers gave daily reminders to students to return their forms. For a sample of 7,500 students, Ellickson and Hawes estimated that this consent procedure would cost an additional $112,500 and require a minimum of 3 weeks, with 20 interviewers working full-time!

SELECTION BIAS

According to Ellickson and Hawes (1989:46) active consent procedures generally result in "under-representation of important groups—Blacks, Asian

Americans, low achievers, children with less well-educated parents, and those at risk for engaging in problem behavior." Further evidence of selection bias attributable to active consent was introduced by Anderman et al. (1995). In this latter study, an identical survey was administered to two groups of students, one under passive consent procedures and the other under active consent guidelines. They found, "Fewer minorities, two-parent households, better school performance, and greater involvement in extracurricular activities all suggest that adolescents whose parents give written consent represent a socially advantaged group" (Anderman et al. 1995:670). As a result of active consent procedures, evaluations of programs that attempt to reduce drug use, teenage pregnancy, gang affiliation, violent behavior, and other "problem behaviors" are especially susceptible to bias introduced by such procedures. The very groups that are underrepresented under active consent procedures may be the ones most likely to be in the at-risk population, making it extremely difficult to obtain accurate information about the effectiveness of such prevention programs. For example, Hansen and colleagues (1985) examined differential attrition rates in evaluations of prevention programs, reporting that differential attrition limited the external validity of the studies. Should the issue of differential attrition be considered when decisions about consent procedures are made?

In this article, our objective is to address the following questions:

- What is the effect of active consent procedures on participation rates?
- Is there a difference between students whose parents give consent and those who either withhold consent or fail to return consent forms?
- Is the active consent subsample different from the initial sample?

CURRENT STUDY

The current research is part of a national evaluation of a school-based gang prevention program taught by uniformed law enforcement officers, Gang Resistance Education and Training (G.R.E.A.T.). Since its inception in 1991, G.R.E.A.T. has been adopted by numerous law enforcement agencies, and as of March 1998, more than 3,300 officers from all 50 states and the District of Columbia had completed G.R.E.A.T. training.

The primary objective of this larger evaluation is to assess the effectiveness of G.R.E.A.T. in terms of attitudinal and behavioral consequences. Recognizing the weaknesses of retrospective, cross-sectional designs, a prospective longitudinal panel design was implemented at six sites (Portland, OR;

Phoenix, AZ; Philadelphia, PA; Las Cruces, NM; Lincoln and Omaha, NE), selected to represent the geographical and population diversity of the United States. A quasi-experimental research design guided the assignment of classrooms to experimental and control conditions. Both groups of students completed pre- and posttests during the first half of the 1995-1996 school year. First year follow-up questionnaires were administered during fall 1996, and second year surveys were administered during fall 1997. At five of these sites, passive consent procedures were approved for the pretest survey. Active consent was obtained for the longitudinal phase of the evaluation. The remaining site, Omaha, required active parental consent from the outset. Whereas two prior studies have examined differences between samples using active and passive consent (e.g., Anderman et al. 1995; Ellickson and Hawes 1989), this study examines the effect of active consent on the same sample: thus controlling for preexisting sample differences. The current article uses pretest data from the five passive consent sites, examining demographic, attitudinal, and behavioral differences between those students whose parents subsequently provide active consent and those who either refuse active consent or who fail to return a consent form. That is, by comparing pretest data, we are able to test whether students whose parents later provide active consent differ from those students whose parents do not provide consent.

SAMPLE DESCRIPTION

The current sample consists of 2,496 middle-school students who completed the pretest questionnaires during fall 1995. These students account for 86% of students enrolled at the beginning of the school year at the 18 sample schools in Las Cruces, New Mexico; Lincoln, Nebraska; Philadelphia, Pennsylvania; Phoenix, Arizona; and Portland, Oregon. A total of 113 classrooms are included in this sample, 56 of which were experimental and 57 control. Under passive consent procedures that were approved for the pretest study phase, only 13 parents (0.4%) refused their child's participation.

ACTIVE CONSENT PROCEDURES

Active consent procedures were implemented in four of the five cities following completion of the posttests.[1] A modified Dillman (1978) total design method was used, although the specific procedures varied in terms of timing and sequencing across the five sites.[2] The following serves as an ideal type of procedures that were followed. During the spring and summer of 1996, three

direct mailings were made to parents of survey participants. Included in the mailings were a cover letter, two copies of the parent consent form for student participation, and a business reply envelope. With a substantial Spanish-speaking population in Phoenix and Las Cruces, mailings to parents in these cities included Spanish versions of the cover letter and consent form. In addition to the mailings, all parents not responding after the second mailing were contacted by telephone. School personnel also cooperated by distributing consent forms and cover letters at school. Teachers in all of the classrooms involved in the evaluation assisted with this process, rewarding students with a new pencil upon return of the forms. Some teachers agreed to allow us to offer incentives such as pizza parties to classrooms in which a minimum of 70% of students returned a completed consent form. Other teachers offered incentives on their own, including early lunch passes and extra credit points.

Based on previous experience with obtaining active consent from parents of middle-school aged students, we knew that we would need at least 4 weeks of intensive effort at each site to reach an acceptable response rate.[3] Due to a combination of staffing patterns and the logistics of coordinating consent processes at five national sites, we staggered the consent process throughout the winter and spring of 1996. This allowed for several mailings and coordination with school personnel prior to the end of the school year while allowing for an additional mailing during the summer prior to the survey administered during the fall of 1996.

RESULTS

RETURN RATES

As described above, the exact procedures and timing of the active consent process varied across sites. In all instances, however, multiple methods were used in some combination to achieve the response rates reported here. As can be seen in Table 1, in spite of the time limitation imposed for the active consent procedure in Lincoln, we were successful in obtaining a 70% response rate prior to the posttest administration. A subsequent mailing to nonrespondents after the posttest resulted in a final response rate of 77%. Of the five sites, this one received the most labor-intensive attention, in part due to the time constraints but also because the research headquarters are located in this site, which allowed for greater concentration of staff time and effort.

In the two sites where we conducted two mailings prior to working with school personnel to obtain consent forms (Las Cruces and Phoenix), the

TABLE 1: Results of Active Parental Consent Process

		Affirmative		*Refusal*		*No Return*	
Site	*Sample Size*	n	*%*	n	*%*	n	*%*
Las Cruces	626	301	48	71	11	254	41
Lincoln	653	425	65	79	12	149	23
Philadelphia	465	228	49	28	6	209	45
Phoenix	569	300	53	54	9	215	38
Portland	583	321	55	58	10	204	35
Total	2,896	1,575	54	290	10	1,031	36

mailings produced return rates of 25% and 29%. With the cooperation of the teachers, the phone call to nonrespondents, and two more mailings, final return rates of 59% and 62% were achieved.

In Portland, with one mailing prior to involvement of school personnel, 8% of parents returned a form after the first mailing. Three more mailings, telephone calls, and teacher assistance produced an overall response rate of 65%. At the remaining site, Philadelphia, where school cooperation was used from the outset, we had the lowest overall return rate of 55%.

These return rates should not be considered as products of the particular sequence of methods used at each site. The demographic and regional differences among the five sites, especially with regard to characteristics that Ellickson and Hawes (1989) indicated were associated with lower participation rates, preclude such conclusions. Our student sample in Lincoln, for example, is predominantly White, with a high percentage of intact families and the majority of respondents reporting that their parents have more than a high school education. On the other hand, the Philadelphia students are predominantly African American, and a minority of parents have more than a high school education, and a much smaller percentage of respondents are from intact households. It would appear that community demographic characteristics may play an important role in response rates. In spite of such differences, however, we can conclude that through diligence and the use of multiple methods, researchers can obtain participation rates in excess of 50% under active consent procedures.

To summarize, the following general procedures were used in some form in the five sites: a minimum of three mailings, follow-up phone calls after the second mailing, collaboration of school teachers, and the offering of incentives to those students returning completed forms. These procedures resulted in an overall response rate of 64% (54% providing affirmative consent and 10% withholding consent), while 36% of parents failed to return the consent

forms. As seen in Table 1, the response rates varied considerably among the sites, with one site achieving a rate of only 54%, while another attained a 76% response rate.

NONRESPONSE

An interesting issue in the active consent debate is the interpretation of nonresponse. Proponents of active consent argue that the absence of positive consent is best interpreted as a refusal, whereas proponents of passive consent maintain silence is passive acceptance. Ten months after the last attempt to obtain active consent prior to the Year 1 follow-up survey, we conducted another mailing to the 921 parents who had not returned consent forms and for whom we had not received notification from the U.S. Post Office of an erroneous address. In spite of the fact that all these addresses were supposedly valid, many (124 or 13%) of these forms were returned as undeliverable (e.g., occupants moved, no such address, etc.). A total of 27 (3%), however, were completed and returned. Clearly, this subsample of nonrespondents represented a reluctant group. Of the 27 parents returning the forms, 21 (78%) provided affirmative consent, while only 6 refused their permission to have their child participate in the survey. Although we cannot make definitive statements based on this small group, it is clear that a nonresponse is not synonymous with a refusal.

DIFFERENTIAL ATTRITION

As discussed in the preceding section, there is little question that active consent procedures affect participation rates. However, the question remains, Does the nonresponse rate affect the representativeness of the sample? That is, are those who participate different from those who refuse or fail to return a consent form?

Table 2 provides a description of the demographic composition of the initial sample of students completing the pretest questionnaire and also provides a comparison of those students for whom active consent was obtained with those whose parents refused or did not return a form. There were no statistically significant differences between the positive consent group and the refusal/nonresponse students by age or gender. Statistically significant differences ($p < .01$), however, were found for race, parental education, family structure, and for participation in the G.R.E.A.T. program. Parents of White respondents were more likely to provide permission for their children to participate in the survey than were African American and Hispanic parents.

Approximately 63% of White parents gave permission compared to only 52% of African American parents and 50% of Hispanic parents. These race differences persisted when we controlled for parental education and family structure.

With respect to parental education and family structure, parents with less than a high school education and those in nonintact households were the least likely to provide consent: 52% of those not completing high school agreed to their child's participation, compared to 62% of those with more than a high school education. Because this measure reflects the student's perception of parental education, it should be treated cautiously, especially given the substantial number of missing cases (30% of the sample). A total of 52% of parents in nonintact households provided consent compared to 60% of those in intact households.

Perhaps more important than these comparisons between groups is the difference between the initial sample and the affirmative response group—that is, those students who would be continuing in the survey and upon whose responses program effectiveness would be based. The affirmative sample tends to be slightly younger, consist of more girls and more White youth, be from intact homes, and have parents who have more than a high school education.

With respect to attitudinal and behavioral measures, we observe in Table 3 that there are a number of differences between youth whose parents provided consent and those who did not. The mean scores reflect responses provided by the youth on the pretest questionnaires. Those students whose parents returned consent forms reported more prosocial attitudes than did the children of those parents who did not provide consent: A statistically significant difference was found for 10 of 19 attitudinal measures and for both behavioral measures. Relative to the students for whom consent was not obtained, the positive consent students had more favorable attitudes toward the police, were less impulsive, had less favorable attitudes toward gangs, were more committed to school, had greater commitment to positive peers, reported higher levels of guilt for committing deviant acts, perceived fewer constraints on their educational opportunities, were less likely to rationalize behavior as appropriate, had more prosocial peers, and indicated less commitment to negative peers. For an overview of these scales, see the appendix.

With regard to self-reported drug use and delinquent behavior, the nonconsent group was significantly more involved in these activities than was the consent group. Among the consent group, for instance, the average number of self-reported delinquent acts committed during the preceding year was .36, compared to .46 for the nonconsent group. Likewise, the average number of times the consent group used illegal drugs was .39, compared to .53 for the

TABLE 2: Demographic Characteristics of the Initial Sample and a Comparison of the Active Consent and Nonconsent Samples

	Initial Sample		*Active Consent*			*Nonconsent*		
Demographic Characteristic	N	*Column %*	N	*Column %*	*Row %*	N	*Column %*	*Row %*
Age	2,475 (M = 12.13)		1,403 (M = 12.10)			1,083 (M = 12.13)		
Gender								
Male	1,224	49	672	48	55	552	51	45
Female	1,270	51	739	52	58	531	49	42
Race[a]								
White	1,016	43	646	48	64	370	36	36
African American	422	18	219	16	52	203	20	48
Hispanic	521	22	259	19	50	262	25	50
Other	426	18	226	17	53	200	19	47
Parent's education[a]								
Less than high school	161	9	83	8	52	78	11	48
High school	421	24	227	22	54	194	27	46
Greater than high school	1,160	67	720	70	62	440	62	38
Family structure[a]								
Intact family	1,503	61	908	65	60	595	56	40
Single parent	789	32	411	29	52	378	36	48
Other	174	7	82	6	47	92	9	53
Experimental condition[a]								
G.R.E.A.T.	1,508	52	872	55	58	636	48	42
Non-G.R.E.A.T.	1,388	48	703	45	51	685	52	49

NOTE: G.R.E.A.T. = Gang Resistance Education and Training.
a. Chi-square significant at $p < .01$ for active consent and nonconsent comparison.

TABLE 3: Comparison of Active Consent and Nonconsent Samples—Attitudinal and Behavioral Measures (in means)

	Initial Sample	*Active Consent*	*Nonconsent*
Attitudinal measures			
Attitudes to police*	3.36	3.43	3.28
Cultural identity	3.75	3.74	3.75
Attitudes about gang*	1.76	1.71	1.83
Good things about being in a gang	1.19	1.18	1.21
Bad things about being in a gang	1.72	1.73	1.70
Gang attachment	3.40	3.40	3.40
Guilt expected for potential deviance*	2.61	2.64	2.56
Impulsivity*	2.93	2.88	2.99
Limited educational opportunities*	1.87	1.81	1.96
Neutralization, total*	2.70	2.66	2.77
Delinquency of peers	1.50	1.48	1.54
Prosocial peers*	3.25	3.28	3.20
Peer commitment, negative*	2.08	2.02	2.16
Peer commitment, positive*	4.10	4.19	3.97
Risk seeking	2.91	2.88	2.94
School commitment*	3.86	3.90	3.80
School environment	2.53	2.52	2.54
Self-esteem	4.05	4.08	4.02
Social isolation	2.35	2.36	2.33
Behavioral measures			
Drug use*	.45	.39	.53
Total delinquency*	.40	.36	.46

*$p < .01$, *t* test, positive versus nonconsent.

nonconsent students. Not only is the consent group composed of students at lower risk, as determined by demographic and attitudinal measures, but the students are also less involved in illegal or risky behavior.

MULTIVARIATE ANALYSIS

The bivariate analyses reveal some interesting differences between the youth whose parents provide positive consent and those youth whose parents either refuse or fail to respond. In an attempt to examine the relative effect of demographic, attitudinal, and behavioral factors on consent status, we conducted a logistic regression analysis. We included only those attitudinal measures that were significant in the bivariate analyses, and for parsimony, we included only the total delinquency scale, excluding the drug use

measure. Although there was a statistically significant difference between the two groups based on parental educational status, we did not include this variable in the logistic regression model due to the substantial number of cases with missing data.

Table 4 reports the logistic regression results from three different models, one including only demographic variables, one including only attitudinal and behavioral measures, and finally one incorporating all of the variables of the preceding two models. The dependent variable consists of positive consent (value of 1) and withholding consent (value of 0). Model 1 confirms the bivariate results, showing a statistically significant effect of both race and family structure on consent status. For race, White is the referent category, while intact family structure serves as the referent for the family structure variable. Parents of African American, Hispanic, and other non-White students are significantly less likely to return an affirmative response to the active consent process (only about two thirds as likely as White parents as indicated by odds ratios between .583 for Hispanic and .693 African American).

For Model 2, only two of the attitudinal measures (attitudes to police and impulsivity) were statistically significant. Youth with more positive attitudes were more likely to be in the active consent sample, while youth with high scores on the impulsivity measure were less likely to be included in the final active consent sample. In Model 3, race (but only Hispanic and other non-White youth) is the only variable that retains a statistically significant effect on the consent status. With the inclusion of all of these predictors in the model, the bivariate relationships of these variables to consent status were not replicated. Several of the attitudinal scales were significant at the .10 level, and the direction of the relationships was the same as those reported in the bivariate analyses: The active consent sample tends to be more prosocial as reflected in more positive attitudes to police, higher levels of perceived guilt, lower rates of impulsivity, and higher levels of school commitment.

SUMMARY

Survey response rates and sample bias are two important aspects of the research process. Participant informed consent, likewise, is a vital part of research. The informed consent process has a deleterious effect on response rates and, to some extent, on sample representativeness. Social science researchers are generally confronted with an underrepresentation of racial and ethnic minorities and of non-middle-class respondents (i.e., both lower and higher class individuals are less likely to respond to surveys). For evaluation

TABLE 4: Logistic Regression Model for Active Parental Consent

	Model 1			*Model 2*			*Model 3*		
	B	SE	*Exp*(B)	B	SE	*Exp*(B)	B	SE	*Exp*(B)
Age	–.135	.064	.874	—	—	—	–.106	.075	0.899
Gender (male)	–.125	.085	.882	—	—	—	–.035	.100	0.096
Race									
African American	–.366*	.123	.693	—	—	—	–.322	.155	0.725
Hispanic	–.540*	.112	.583	—	—	—	–.485*	.129	0.616
Other	–.421*	.119	.657	—	—	—	–.361*	.134	0.697
Family structure									
Single parent	–.264*	.094	.768	—	—	—	–.264	.106	0.768
Other	–.486	.169	.615	—	—	—	–.411	.198	0.663
Attitudes to police	—	—	—	.190*	.072	1.210	.129	.075	1.138
Attitudes about gang	—	—	—	–.029	.071	0.972	.202	.075	1.020
Bad things about being in a gang	—	—	—	.012	.150	1.012	–.038	.157	0.963
Guilt expected for potential deviance	—	—	—	.098	.139	1.103	.151	.145	1.162
Impulsivity	—	—	—	–.214*	.072	0.808	–.156	.074	0.856
Neutralization	—	—	—	.023	.088	1.023	.136	.093	1.146
Delinquency of peers	—	—	—	.077	.114	1.080	.077	.117	1.080
Prosocial peers	—	—	—	.014	.074	1.014	–.027	.077	0.973
Risk seeking	—	—	—	.080	.062	1.084	.046	.066	1.047
School commitment	—	—	—	.054	.084	1.055	.173	.089	1.189
Self-reported delinquency	—	—	—	–.080	.077	0.923	–.069	.079	0.933
Model chi-square	57.003*			32.615*			59.130*		
Degrees of freedom	7			11			18		
Nagelkerke R^2	.024			.016			.030		

*$p < .01$.

research, this differential attrition of at-risk participants raises serious concerns about the validity of outcome measures. As others have suggested (Anderman et al. 1995; Hansen et al. 1985), every effort should be made to reduce attrition or be confronted with the possibility that differential attrition "will interfere with the interpretation of outcome results, possibly masking true program effectiveness" (Hansen et al. 1985). In this article, our concern was to examine the effect of active parental consent on both participation rates and sample representativeness. We documented the efforts to secure active parental consent in five cities. The modified Dillman (1978) method produced an overall return rate of 64%, with considerable variation between study sites. Demographic characteristics of the sample clearly affect participation rates; in a stable mid-Western community (77%), response rates were considerably higher than in an East Coast metropolitan area (54%).

Furthermore, we have documented the need for, and the effectiveness of, multiple methods to obtain active consent. One or two mailings to parents resulted in response rates of less than 30%. Consent procedures using school personnel were somewhat more effective but failed to reach as many parents as the combined approach. Yet, for multiple site and large-scale surveys, such techniques are costly. A conservative estimate of the costs involved in implementing the active consent procedures for the five sites described in this article is $50,000. This estimate includes the following: incentives, stationary, envelopes, postage, telephone calls, and personnel. Clearly, such costs may be prohibitive for many projects.

In addition to the deleterious effect on participation rates, this study was able to document a selection bias that is introduced by the active consent procedure. Parents of at-risk youth (as defined by demographic risk factors and by responses to attitudinal and behavioral measures) are less likely to return permission slips for their children's participation in surveys. Although the consent and nonconsent groups reported attitudes and behaviors that were statistically significantly different, these differences did not persist in the multivariate analyses once demographic differences were controlled. As indicated above, however, the direction of the relationships found in the multivariate analyses were consistent with the bivariate analyses, suggesting that at-risk students are less likely to continue in an evaluation under active consent procedures than they are under passive consent procedures. To what extent does such a systematic exclusion of youth considered to be at greater risk of delinquency, gang membership, drug use, and other adolescent problem behaviors effect the external validity of evaluations in which active consent procedures are required?

POLICY IMPLICATIONS

With these findings, one must raise the following question: Given the biasing effect of the active consent process, is there some alternative to the increasingly common requirement of active parental consent? Given the cost of obtaining a reasonable participation rate, can measures be taken to safeguard the rights of children and parents while contributing to the integrity of evaluation research? We would like to propose two different methods that could be implemented in school-based research and that also could be modified to other settings.

One alternative would be for school personnel to obtain active consent for student participation in school-sanctioned research and evaluation projects at the beginning of the school year. This is a procedure widely used by school districts to collect permission slips for field trip participation. Such a procedure is currently used in some larger districts to regulate their internal research and evaluation projects.

A second alternative would be to implement what could be described as a "passive-active consent" process. This would entail mailing cover letters and consent forms with business reply envelopes to all parents or legal guardians at the address provided to school officials. After 3 weeks, a second mailing should be conducted indicating that it is a second mailing and that the student will be included in the research if the parent does not withdraw the student. After 2 more weeks, the researcher will assume that nonresponse is an affirmative response. Although such a procedure is consistent with passive consent assumptions, rarely do passive consent procedures include direct mailings and even more rarely two separate mailings. Two mailings over a 5-week period will give ample time for the mail to be delivered or forwarded to the appropriate address and for a response to be returned to the school.

Participation in research and parental rights to restrict student participation in such research should not be viewed as competing interests. It is imperative that the rights of children and their parents be honored and that the ethical obligations of researchers be fulfilled. It is also imperative for sound policy and programmatic funding decisions that external validity be maintained. Some compromise to the current situation needs to be reached.

APPENDIX
Attitudinal Measures and Summary Scale Characteristics

	Scale Mean	*Scale Standard Deviation*	*Alpha*
Attitudes to police (Webb and Marshall 1995): Seven items such as "Police officers are honest."	2.95	0.84	.85
Cultural identity (Taylor et al. 1994): Four items measuring students' ethnic identity, for example, "I feel good about my cultural or ethnic background."	3.80	0.72	.60
Good things about gang membership (Winfree, Vigil-Backstrom, and Mays 1994): Identification of six possible benefits that might accrue to gang members (e.g., protection, money, excitement).	1.31	0.31	.84
Bad things about gang membership (Winfree, Vigil-Backstrom, and Mays 1994): Seven items tapping negative consequences of gang affiliation (e.g., trouble with police, guilt, getting hurt).	1.68	0.32	.83
Risk seeking (Grasmick et al. 1993): Four items about risk-taking behavior, for example, "Sometimes I will take a risk just for the fun of it."	3.06	0.94	.82
Impulsivity (Grasmick et al. 1993): Four items measuring impulsive behavior, for example, "I often act on the spur of the moment without stopping to think."	2.85	0.74	.63
Commitment to negative peers: Three questions such as "If your friends were getting you in trouble at home, how likely is it that you would still hang out with them?	2.40	1.14	.84
Commitment to positive peers: Two questions such as "If your friends told you not to do something because it was against the law, how likely is it that you would listen to them?	3.80	1.12	.77
Limited educational opportunity: Four items measuring perceived limited educational opportunities. A representative question is, "You'll never have enough money to go to college."	1.88	0.74	.70
Neutralization: Nine items tapping the respondent's belief that it is okay to engage in some deviant behaviors if extenuating factors are present. For instance, "It's okay to tell a small lie if it doesn't hurt anyone."	3.11	0.81	.86

APPENDIX Continued

	Scale Mean	*Scale Standard Deviation*	*Alpha*
Guilt: Sixteen questions asking how guilty the youth would feel if they did such things as "hit someone with the idea of hurting them" or "using alcohol."	2.31	0.56	.94
School environment: Nine items measuring safety in the schools, for example, "There are gang fights at my school."	2.67	0.60	.59
Self-esteem: A six-item scale consisting of statements such as "I am a useful person to have around."	4.01	0.71	.82
School commitment: Seven items tapping the youth's desire to succeed in school, for example, "I try hard in school."	3.57	0.77	.81
Social isolation: Three items measure the degree to which the respondent felt lonely at school, with friends, or at home.	2.44	0.95	.71
Gang attachment: Seven items asked only of self-admitted gang members, tapping the extent to which they see their gang as a family and feel they belong in the gang.	3.60	0.85	.91
Attitudes about gangs: Four questions asked of all respondents inquiring about the respondents approval of gangs and gang activity.	2.09	0.94	.88
Prosocial peers: Eight items about the kinds of prosocial things in which friends are involved.	2.97	0.80	.84
Delinquent peer behavior: Sixteen items about illegal activities in which the friends are involved.	1.99	0.86	.94
Total delinquency: A summary index consisting of the preceding 14 items and 3 additional items: been involved in gang fights; avoided paying for things such as movies, bus, or subway rides; lied about age to get into some place or to buy something.			
Drug use: Used tobacco products; alcohol; marijuana; paint, glue, or other things you inhale to get high; other illegal drugs.			

NOTE: Unless otherwise indicated, these measures were adopted from the National Youth Survey (Elliott, Ageton, and Huizinga 1985) or the Denver Youth Survey (Huizinga, Esbensen, and Weiher 1991).

NOTES

1. In the fifth site, we were required to obtain active consent prior to the posttest survey, but the pretest was still completed under passive consent procedures.

2. In two of the other sites, we conducted two mailings prior to contacting school personnel and requesting their assistance in the process. In a third site, we asked the teachers for assistance after only one mailing; and in the fourth site, we worked directly with the teachers from the outset and only resorted to the direct mailings after the return of forms was reduced to a trickle.

3. In the one site where we obtained active consent prior to distribution of the posttest, we were confronted with a serious time constraint problem; the end of the semester was only 4 weeks away when the request to obtain active parental consent was made. At the conclusion of the semester, student schedules would be changed, and it would no longer be possible to survey the students in their original classrooms. The questionnaires had to be completed prior to the end of the first semester. Thus, we had less than 3 weeks to actually implement the active consent process and still have time to administer the questionnaires. In this site, we implemented simultaneous mailing and distribution of forms in the classrooms and visited the classrooms every other day to collect returned forms.

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