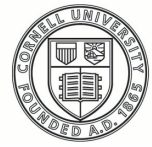
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Conducting Industrial and Organizational Psychological Research: Institutional Review of Research in Work Organizations

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Keywords
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Running Head: HUMAN SUBJECTS REVIEW

Conducting Industrial and Organizational Psychological Research: Institutional Review of Research in Work Organizations

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Abstract

Although informed consent is a primary mechanism for insuring the ethical treatment of human participants in research, both federal guidelines and APA ethical standards recognize that exceptions to it are reasonable under certain conditions. But agreement about what constitutes reasonable exceptions to informed consent sometimes is lacking. The research presented the same protocols to samples of respondents drawn from four populations –Institutional Reviewer Board (IRBs) members, managers, employees, and university faculty who were not members of IRBs. Differences in perceptions of IRB members from the other samples with respect to the risks of the protocols without informed consent and on the feasibility of conducting the research in employment organizations are discussed in terms of implications for industrial and organizational psychology research.

Conducting Industrial and Organizational Psychological Research: Institutional Review of Research in Work Organizations

Informed consent is the practice of providing participants in research with information about the conditions and the risks they may incur as a result of their participation and doing so prior to their voluntary choice to participate or not participate. Informed consent is a, if not the, preferred mechanism for the protection of human participants in research as described in federal guidelines for protecting human subjects (OPRR Reports, 1991; Federal Register, 1997), the APA ethical principles (APA, 1992) and a recently published report of an APA taskforce (Sales & Folkman, 2000). However, both federal guidelines and APA standards allow for exceptions to informed consent under very limited conditions. The federal guidelines are explicit as to the conditions necessary for exceptions; APA standards are less so. When (1) the research involves no more than minimal risk,[1] (2) waiving or altering informed consent is not believed to affect the rights and welfare of the participants, (3) the research could not practically be carried out without the waiver, and, if appropriate, (4) the participants could be informed after having participated, federal guidelines allow for exceptions to informed consent (Title 45, Code of Federal Regulations, Part 46, 1991).

Field studies in industrial and organizational psychology often meet conditions that allow for exceptions to informed consent. Frequently data are collected from employees that serve both practice and science. For example, consider the common practice of recording telephone conversations between customer service representatives and customers in order to monitor employee performance for coaching. When this occurs, both the customer and the employee are informed that the conversation may be recorded. If a researcher were to also want to use these data in a study of negotiation and persuasion or as part of a study he or she hoped to publish evaluating a new technique for training customer service representative, both employees and customers would have to be informed of the research and its purpose prior to consenting to participate in the research or the research would need to be judged acceptable as an exception to informed consent.

In spite of the fact that industrial and organizational psychological research has frequently been conducted in ways that protect the well-being of research participants without using informed consent, a number of conditions at present raise cause for concern about researchers' ability to continue to justify exception from informed consent. One is a shift in oversight of the ethical treatment of research participants. In the past, Institutional Review Boards (IRBs) established at universities, hospitals, and other organizations primarily involved in the conduct of research reviewed research protocols for their treatment of human participants. IRB members were drawn from both within and outside the organizations in an effort to represent the values and expectations of the community. The treatment of human participants in research was guided by board members' values and by the ethical standards of professional associations with which researchers were affiliated.

Today, control over the decision about what is and is not reasonable treatment of human participants still exists in IRBs and the ethical standards of scientific associations, such as the APA. However, to the traditional sources of regulation is added scientific journals. Ethical standards are imposed at the output end of the research process when manuscripts are submitted for publication. The shift to outcome control is firmly in place in medical journals and scientific journals that attract scholars from multiple disciplines including psychology, for example, Science. It is also the case for many psychological journals. Instructions to authors submitting their work to Psychological Science, for example, are instructed that, "Investigations on human subjects must include a statement indicating that informed consent was obtained…" (Psychological Science, 1999). These instructions are unambiguous; informed consent is required with no option for exceptions.

Assuming as we do that there are times when research in work organizations cannot be conducted under conditions of informed consent and yet a legitimate case can be made for not providing informed consent, either inflexible journal policies or decreased willingness of IRBs to consider the exception creates a potential barrier to the conduct of industrial and organizational psychological research. Exceptions, by their very nature, are more difficult to justify than standard practices. In today's

environment where IRBs are often under close scrutiny by federal monitoring agencies and by pressure to create fail-safe policies and practices, anything that requires consideration as an exception becomes potentially threatening.

Present Research

Purpose. The present research was motivated by the fact that industrial and organizational psychologists serve two masters, both of whom believe in the protection of participants in research but neither of whom may fully appreciate the needs of the other. Yet, whether or not research can be conducted depends upon the approval of both constituencies. One is the scientific community at large represented by other behavioral scientists and IRBs. Members of this community rely heavily on informed consent as the way in which they construe reasonable treatment of human participants in research. The other constituency is the organizational community where research often must be conducted in a way that both protects human participants and does not interfere or appear to interfere with the effective functioning of the organization. In organizations, whether or not procedures actually get in the way of organizational performance is irrelevant. If those responsible for giving permission to conduct the research believe that it is likely to have adverse effects on organizational functioning, permission to conduct the research probably will not be granted. The current research was designed to compare the reactions of members of the scientific and organizational communities to identical research protocols, some of which involved informed consent and some of which did not. Our primary interest was in comparisons of perceptions of risk and of the feasibility of conducting the research under the conditions described. The purpose of the research was to observe whether differences between these two groups exist in samples selected to represent each group. If differences do exist, their implications for industrial and organizational psychological research can be discussed.

Overview of Research. The research compared the reactions of members of IRBs presented with one of four forms of a typical test validation study to the reactions of human resource managers, job applicants, and university faculty members. The last sample was included because university IRBs are

composed primarily of faculty members who are selected to represent the ethical standards of the university's faculty from which they are drawn. We focused on judgments of the extent to which a research study presented to participants put them at risk and on beliefs about the likelihood that the research could be carried out with job applicants. Four research proposals were created to vary the way in which consent was obtained and the sensitivity of the questions asked job applicants. Sensitivity was varied because field research in industrial-organizational psychology may deal with sensitive issues (e.g., affirmative action, sexual harassment). According to the guidelines for the treatment of human subjects in research, information that is socially or politically sensitive should not affect judgments about the acceptability of research if the participants are not put at risk and the data are kept confidential by the researchers (Ceci, Peters, & Plotkin, 1985). However, research with IRB members consistently finds that board member decisions are affected by sensitivity in spite of these guidelines (Mosher, 1988). The research compared IRB members' beliefs about risk to human participants and the acceptability of consent procedures to the beliefs of people sampled from three other groups -- (a) job applicants, (b) human resource managers, and (c) faculty members in order to better understand and respond to institutional means of enforcing ethical standards for research in industrial and organizational psychology.

Method

Procedure

Data were collected by distributing survey instruments to four groups of individuals selected for their distinct sample characteristics (see below). The first two pages of the four-page survey described a proposed test validation study in which 10 experimental biodata items were to be added to an existing biodata application form. As described in the survey, the proposed study was to be conducted on a sample of job applicants in which only previously validated items would be used for selecting applicants. Responses to the experimental items were to be removed from the application immediately and not shared with anyone involved in the selection of the applicants. Survey respondents in our study first read the

description of the validation study proposal and then answered a number of questions about their reactions to what was proposed. The survey was typically completed in less than 10 minutes.

Sample

Data were collected from four sets of persons who responded as individuals by rating characteristics of a single study described to them. The decision to use individuals rather than groups was based on several factors. First, although the review of research by IRBs is technically the judgment of a committee, in practice members of these committees typically review proposals individually and reach an individual decision. These decisions are then pooled. If there are disagreements, they are worked out. But individual level decisions are the primary inputs into the IRB decision. The other reason for using individuals was that group decisions did not fit the way that members of one or more of the other samples (e.g., job applicants) would judge research. Therefore, individual level decisions represented the ones most appropriate for the problem at hand and the samples of interest.

IRB members. University faculty on the Institutional Review Boards (IRBs) of their universities constituted the primary sample. Since the research study was a standard personnel selection validation study, we obtained the names of the IRB chairpersons at all U.S. universities (except the authors') that have doctoral programs in industrial and organizational psychology (N = 41 universities). The letter to IRB chairpersons described our study as one of comparing IRB members' opinions about a study to opinions of those who do not serve on such boards. Twenty-one IRB chairpersons responded by providing us a list of their IRB board members and their university addresses. From the rosters returned to us, a sample of IRB members was randomly selected. Table 1 describes the sample characteristics.

Other faculty members. A second sample of faculty members was drawn from the same universities. In this case, when a survey was returned by a faculty member in the IRB sample, we randomly selected three faculty members from the same academic department as the person who returned the survey.

Department directories on the web served as the source from which the matched faculty members were drawn. Table 1 describes this sample.

Human resource professionals. The third sample contained persons employed as human resource managers. A mid-Michigan association of human resource managers that holds monthly meetings on topics of interest to its members and shares information on issues important to all of them (e.g., changes in employment law) gave us permission to mail our survey to its members. A letter accompanying the survey explained the study's purpose and assured respondents of the confidentiality of their data. As with the other samples, completed surveys were returned by mail (see Table 1).

Job applicants. The final sample contained graduating seniors in an undergraduate business course who were seeking full time employment and had completed at least one job interview. All who took a survey completed it. However, among those who did not volunteer were both those who had not gone on an interview and those who had but chose not to participate. Therefore, as can be seen in Table 1, it was not possible to determine the size of the potential pool of job participants.

Design

Three variables were manipulated in the study. One was the sample. The four conditions of this factor were described above. Two other variables, with two levels each, were completely crossed with sample. The latter two variables were manipulated by creating four versions of the validity study that served as the stimulus object presented to respondents. Participants were randomly assigned one description of a validity study with high/low consent and high/low sensitivity. Each manipulation is described below.

Consent. Under the heading of "Consent" in the study described to the participants, one of two descriptions appeared. The low consent condition read, "Since the study involves a process that is part of standard hiring practices and does not affect, in any way, the hiring decision for the applicant, there will be no explicit consent requested of the participants." For the high consent condition, it said, "As indicated in the procedure above, the experimental items will only appear on the last page. Therefore, at the top of the

last page the following text will appear. 'The following items are experimental ones being considered for future use on the application form. How you answer them WILL NOT affect the hiring decision. In fact, when you turn in the form, these items will be removed from the back of the form and filed in a secure location that can only be accessed by the researchers. Completing these items is voluntary. If you complete any or all of them, please sign below indicating that you are doing so voluntarily.'"

Sensitivity. Sensitivity was manipulated by the content of the biodata items. Ten low sensitivity items appeared on one list and ten high sensitivity items on the other. Table 2 presents the item stems for each of the two conditions. [2]

Measures

Five-point rating scales with anchors of strongly disagree (1), disagree (2), neither agree nor disagree (3), agree (4), and strongly agree (5) were used. Variable scores were the average over all items measuring the variable.

Risk. Perceptions of risk were measured by four items which asked participants to indicate the extent to which they felt the items and procedures used in the proposed research project would subject participants to harmful effects or risk (e.g., "Applicants in the study just described are placed at little or no risk."). Higher scores indicated less perceived risk. Internal consistency reliability (coefficient alpha) was .87.

Justifiability of consent procedure. Two items asked participants to indicate the extent to which they believed the consent procedures used in the proposed research project were adequate and justified (e.g., "The informed consent procedures used in this research are justified."). Internal consistency reliability for the consent scale was .72.

Feasibility. We included three items designed to measure respondents' perceptions of the proposed research project's feasibility (e.g., "Most companies would be willing to allow the experimenters to conduct the research project as it is described."). These items were combined to form a general measure of

the degree to which participants felt the study could be conducted in an actual work organization. Internal consistency reliability for this scale was .60.

Effects of disclosure on job applicants. We asked participants to indicate the extent to which they felt telling job applicants that their responses would be part of a research project would affect (a) applicants' willingness to apply for the job, (b) the extent to which they would trust the company to be fair to them, (c) their willingness to recommend that their friends apply for jobs at this company, and (d) their willingness to accept the job if it were offered to them. These four items were combined to form an overall measure of the extent to which the participants believed telling job applicants about the study would influence their future behavior toward the company in a positive or negative manner. Internal consistency reliability for this scale was .80.

Results

The total sample means, standard deviations and intercorrelations among the dependent variables are shown in Table 3. The cell means for the effects of the various conditions on the four primary dependent measures are presented in Table 4. Because several of the dependent variables were moderately intercorrelated, we used multivariate analysis of variance (MANOVA) as a first step in our analyses. MANOVA tests for overall effects of independent variables on a linear combination of the dependent variables, thereby helping to reduce the effects of multicollinearity. In addition to testing for overall effects, MANOVA provides control over inflated familywise Type I error rates that can result from multiple univariate tests (e.g., Haase & Ellis, 1987; Leary & Altmaier, 1980; Tabachnick & Fidell, 1996). Using Wilk's criterion, we found that group membership had a significant effect on the combined DVs, $F(12, 836.35) = 7.58$, $p < .001$, $\eta^2 = .09$, as did consent condition, $F(4, 316) = 8.32$, $p < .001$, $\eta^2 = .10$, and sensitivity, $F(4, 316) = 14.37$, $p < .001$, $\eta^2 = .15$. We also found a significant interaction between group membership and sensitivity, $F(12, 836.35) = 2.00$, $p < .05$, $\eta^2 = .03$, and a marginally significant interaction between group and consent condition, $F(12, 836.35) = 1.66$, $p = .070$, $\eta^2 = .02$. If the overall effect was significant, we performed follow-up univariate analysis of variance (ANOVA), which compares

two or more means to see if there are any reliable differences among them, and post-hoc tests to examine specific relationships. These analyses are described below.

We were interested in judgments about two independent sets of reactions to the proposed research. The first issue was the ethical one. The primary concern was with the proper treatment of participants in research. The second issue was that of the feasibility of conducting the research. In all cases, the research proposed was to be conducted on people applying for a real job. Hiring employees, not conducting research was the primary objective in the setting, and permission to conduct the research would have to be obtained from those responsible for managing the organization. The research would have to be sensitive to protecting participants but also to doing so in a way that did not adversely affect the needs of the organization. Thus, the second set of perceptions addressed views of the proposed research vis-à-vis the employment process. The results are clustered in these two sets.

Protection of Human Subjects

Perceptions of risk. To assess perceptions of risk, the risk variable was used as the dependent variable in a 2 x 2 x 4 between groups Analysis of Variance (ANOVA). A number of main effects and interactions were observed. The level of consent, $F(1, 319) = 4.91$, $p < .05$, $\eta^2 = .02$, and degree of sensitivity, $F(1, 319) = 38.12$, $p < .001$, $\eta^2 = .11$, both had a significant effect on participants' perceptions of risk. Procedures were seen as less risky when standard consent procedures were used than when they were not and when the biodata items dealt with nonsensitive as compared to sensitive personal dimensions. There was also a main effect for sample, $F(3, 319) = 3.07$, $p < .05$, $\eta^2 = .03$. A Scheffe's test was used to examine the specific nature of the sample effect. Scheffe's test is used to perform pairwise comparisons of means to test for significant differences across groups. This test revealed a significant difference between the ratings of HR professionals and IRB members, with HR professionals perceiving the proposed studies as representing less risk than the IRB members. Job applicants and faculty also rated the study as less risky than did the IRB members, but these differences were not significant. Finally, there was a significant interaction between sample and sensitivity on perceptions of risk ($F(3, 319) = 2.95$, $p < .05$, $\eta^2 = .03$). The

interaction indicated that the riskiness ratings of IRB members, HR professionals, and faculty were influenced more by the sensitivity of the items than were the ratings of the job applicants. That is, the proposed study was rated as significantly more risky under high sensitivity conditions than under low sensitivity conditions by IRB members $t(69) = 2.56$, $p < .05$, $d = 0.59$, HR professionals $t(93) = 5.63$, $p < .001$, $d = 1.01$, and faculty $t(61) = 2.54$, $p < .05$, $d = 0.62$, but not by job applicants, although the means were in the same direction. This interaction is presented graphically in Figure 1.

Acceptability of consent procedures. The referent for perceptions of risk was the total set of conditions represented by the proposed study as a whole. The second variable addressing treatment of participants focused directly upon the proposed consent procedures. As was the case with risk, the ANOVA revealed main effects for both the sensitivity of the biodata items ($F(1, 319) = 15.73$, $p < .001$, $\eta^2 = .05$) and the consent manipulation ($F(1, 319) = 11.61$, $p < .001$, $\eta^2 = .10$) on participants' ratings of the adequacy of the consent procedures. Consent procedures were seen as less adequate when sensitivity was higher and when consent was less than the standard practice.

More interesting and more important was the effect of subgroup membership on perceptions of the consent procedure. The ANOVA yielded a significant interaction between consent and sample ($F(3, 319) = 3.07$, $p < .05$, $\eta^2 = .03$). A comparison of the means using a Scheffe's test revealed that the human resource professionals viewed the consent procedures as significantly more adequate than did the IRB members or the faculty. The consent x sample interaction on participants' perceptions of adequacy of consent is represented graphically in Figure 2**.**

The effects of sample on views about consent were most clear when within consent condition analyses were conducted. Within the standard, or high, consent condition, there was a significant effect of sample on ratings of adequacy of consent $F(3, 160) = 8.40$, $p < .001$, $\eta^2 = .14$. A Scheffe's test revealed that, within the high consent condition, IRB members viewed the consent procedures as less adequate than the other three groups. Within the low consent condition, there was also a significant effect of sample on ratings of adequacy of consent $F(3, 167) = 7.75$, $p < .001$, $\eta^2 = .12$. A Scheffe's test revealed that, within

the low consent condition, both IRB members and faculty rated the consent procedures as less adequate than did the HR professionals and job applicants. Table 5 shows the mean adequacy of consent ratings for all four samples in both the high and low consent conditions.

To sum up the data regarding the protection of human subjects, sensitivity and consent procedures affected all subgroups sampled in the expected direction; more standard conditions led to less concern about risk and the way that consent was obtained. However, for both dependent variables, IRB members differed from one or more of the subgroups. For risk, IRB members' perceptions of risk were significantly higher than those of HR professionals. The sensitivity of the biodata items influenced the riskiness ratings of IRB members, HR professionals, and faculty, but did not significantly effect the ratings of the job applicants. For ratings of the adequacy of consent, IRB members rated the consent procedures as significantly less adequate than the other three groups when standard consent procedures were followed. In the low consent condition, both IRB members and faculty rated the consent procedures as less adequate than the HR professionals and job applicants.

Intrusion into the Work Setting

Feasibility. Whereas the first two sets of questions directed attention toward the rights and protection of participants in research, the last two focused upon beliefs about whether the research could be conducted (feasibility) in the work setting, and whether, if it were conducted, there may be negative consequences to the organization. When the feasibility variable was used as a dependent variable, there was no main effect for consent procedures, but there was for sensitivity, $F(1, 319) = 45.63$, $p < .001$, $\eta^2 = .13$ (see Table 4). As expected, more sensitive biodata items were less likely to be seen as acceptable.

The effect of sample on ratings of feasibility was only marginally significant, $F(3, 319) = 2.45$, $p = .064$, $\eta^2 = .02$. The IRB members and faculty rated the proposed study as more feasible than did human resource professionals and job applicants. An ANOVA revealed a significant interaction between sample and sensitivity, $F(3, 319) = 4.99$, $p < .01$, $\eta^2 = .05$. The HR professionals, $t(93) = 6.58$, $p < .001$, $d = 1.13$, IRB members, $t(69) = 2.01$, $p < .05$, $d = 0.47$, and faculty, $t(61) = 4.25$, $p < .001$, $d = 0.96$, rated the

proposed study as significantly more feasible under low rather than high sensitivity conditions. This interaction is presented in Figure 3.

Applicant response. The sensitivity manipulation had a significant main effect on ratings of the extent to which all subgroups felt telling the job applicants their responses would be part of a research project would affect their future behavior, $F(1, 319) = 10.28$, $p < .001$, $\eta^2 = .03$. Again the direction of the effect was as expected; more sensitive items were seen as more detrimental (see Table 4). There was also a significant main effect for sample on ratings of applicant response, $F(3, 319) = 7.60$, $p < .001$, $\eta^2 = .07$. A comparison of the means revealed that members of the job applicant sample felt telling the job applicants about the study would have a significantly larger impact on their future behavior than did the IRB members or faculty.

In sum, for both measures directed at the impact on the employment setting, IRB members differed from one or more of the samples. In general, persons directly involved in work organizational settings (either HR professionals or job applicants) expressed greater concerns than the IRB members. However, these results were not straightforward. The effects were moderated by the sensitivity. Furthermore, HR professionals and job applicants were not always similar in their views, nor were IRBs different from the latter groups in all cases. These issues will be addressed in the discussion.

Discussion

For those conducting research in organizations, there are not one but two sets of reviews that must be satisfied before the research is undertaken. One is the IRB that we have already discussed. The second is some agent or agency representing the organization in which the research is to be conducted. Thus, industrial and organizational psychologists must answer to two constituencies – those watching out for the welfare of research participants and those responsible for the well being of the organization. The present research addressed the question of whether or not differences exist in perceptions of risk and feasibility between a sample of IRB members and others.

Our data suggest that satisfying both managers and IRBs may be more difficult than previously assumed. Members of university IRBs, when compared to HR managers and job applicants, differed in their evaluation of one of four test validation studies with biodata items. Although the differences were not large,[3] some consistent patterns emerged. In general, IRB members saw the research as posing more risk to participants than HR professionals and were less satisfied with the adequacy of consent procedures. This was true both when the research described did not explicitly ask job applicants for their consent and when it did. Impressions about the feasibility of the research differed little between IRB members and the other three groups, but both HR managers and job applicants, compared to IRB members and faculty, felt it was more likely that, if applicants were informed of the research, the applicants would react negatively toward the company. This finding suggests that HR managers may be hesitant to allow researchers to obtain informed consent. In addition, because the IRB members in our sample clearly perceived the proposed research to be more acceptable when it involved informed consent than when it did not, this finding provides further evidence for the difficulty that may exist when trying to satisfy both IRBs and HR managers.

Finally, although guidelines for research on human subjects prohibit responding to the political/social sensitivity of the consequences of research (Ceci et al., 1985), the sensitivity of the biodata items had a significant impact on judgments of the treatment of human subjects and perceived reactions toward the organization. Post hoc analyses within the standard consent procedure showed that sensitivity affected risk and consent adequacy judgments for all four groups, including IRB members. Sensitivity accounted for an average of 18% of the variance in ratings of the four criteria when the standard consent procedures were in force. The sensitivity effect for IRB members is consistent with other research (Mosher, 1988) that shows that even when consent procedures and experimental conditions are consistent with acceptable procedures for protecting human subjects, board members are affected by the sensitivity of the information gathered.

While addressing IRB members' stringent views of industrial and organizational psychological research no doubt will need to involve attempts to design research that more closely conforms to standard consent practices, it will also need to involve better defending of industrial and organizational field research to IRBs. There is strong precedent in support of reliance on what Epley and Huff (1998) call "consequentialist" approaches to making decisions about whether research practices are or are not reasonable from an ethical standpoint. For example, laboratory research using deception is found acceptable even though subjects are deceived if those persons do not find their treatment unreasonable. In like fashion, reasonable treatment in employment settings must take into account what employees themselves consider reasonable.

A second reason for focusing attention on IRB member decision making is that guidelines for the ethical treatment of human subjects clearly allow for exceptions in standard consent procedures when the research involves minimum risk. The need to treat such research as an exception rather than as a standard practice often makes it more difficult to defend. In addition, the need to gain approval from both IRBs and from managers when gaps in perceptions of the type we observed exist between them, makes it necessary that we better understand the guidelines for research and that we make our case convincingly. If we don't, badly needed research on important issues at work may be denied for the wrong reasons.

The Necessity of an IRB-like Review: A Prologue

Our discussion throughout is predicated on the assumption that review by those with no vested interest in the research is necessary to insure the well-being of those who participate in the research. Such a review is assumed in all federal policy and APA ethical standards. Even research using archival data where the "participants" cannot be identified or located must be reviewed, according to federal policy (Federal Register, 1997). For example, a longitudinal study of changes in college applicants' SAT scores over the last 50 years must be reviewed by an IRB if the data are to be used for research.

To explore whether those who published research in the primary industrial and organizational psychology journals shared the belief that review by an IRB was necessary, we first identified all articles

published in the Journal of Applied Psychology and Personnel Psychology in 1997 and 1998 that used field samples.[4] Eighty-six studies were identified. The first authors of each study were sent a one page survey with questions directed at the specific article they had published in the journal. Eighty percent responded. In response to the question of whether they felt that their study needed to be reviewed by an IRB, 68% said, "no." Their self-reported behaviors were consistent with their beliefs. Forty-four percent reported that the research they had published in the journal had not been approved by an IRB, we assume because they never subjected it to such a review.

At least two explanations exist for the frequency with which research published in the leading journals was not reviewed. First, some confusion may exist with respect to what constitutes research that needs to be reviewed. In industrial and organizational psychology, the term "research" is applied to data collected for one or both of two purposes. Data may be used for internal organizational use only or it may be used solely for the communication to a broader audience either as a verbal presentation or a published document shared in the public domain (e.g., a journal article). Often data are used for both purposes. Technically, from the standpoint of guidelines for the treatment of human participants in research, only when the data are intended for sharing with the broader audience is it research. A medical analogy is helpful for clarifying this. For medical data, the distinction is made between treatment and research. Treatment data, such as those resulting from a blood test, are used exclusively for diagnosing conditions of a patient and applied to the physician's response to that patient. From a research ethics perspective, treatment is not research, and treatments do not need to be reviewed by and IRB. However, if the data that are used for treatment are also part of a larger study where the conclusions are to be generalized to more than the specific patient, the data are considered part of research. In many cases, the same data are used for both treatment and research. When that occurs, research ethical considerations apply. As might be expected, gray areas exist where it is sometimes difficult to decide whether the behaviors of physicians are only treatments or fall under the purview of research.

Among industrial and organizational psychologists, the distinction between data collected for organizational use only and data gathered for research may also not be clear. Sometimes the purpose changes in the middle of a project as would be the case when the "researcher" was initially a consultant to the organization then, after developing and conducting the research observed things in the data of interest to a broader audience so wrote them up for publication. It is likely that the lack of a clear distinction between what is and what is not research contributed to the ambiguity with respect to whether or not the research protocols for work published in the industrial and organizational psychology journals required review by an IRB.

A second source of confusion about the need for review of research protocols results from the fact that Institutional Review Boards tend to exist primarily in universities and hospitals where research is conducted and where the researcher often has some formal employment relationship. Industrial and organizational researchers may conduct work that would be classified as research but yet not be employed by an organization that has an IRB. Or, if they were employed by a university, they may not see their activity with the other organization as something that requires IRB review. They may, for example, have a consulting relationship with the other organization in which the data were collected. Thus, industrial and organizational psychologists may not have ready access to IRBs or, if they are university faculty but gather the data as part of a consulting agreement, they may not see the need for IRB review. For whatever reasons, our data imply that field research in industrial and organizational psychology frequently is not reviewed by an IRB. If not, the potential differences between IRB members and employers, employees, and industrial and organizational psychology researchers with respect to the practice of informed consent is likely to be underestimated.

Although we understand the confusion, we believe that, in the future, research in the field of industrial and organizational psychology can no longer avoid external review, nor should it. We have argued throughout this manuscript that under certain conditions there are legitimate reasons to conduct industrial and organizational psychological research without informed consent. Yet, if there is no review

process involving judgments by those other than the researchers themselves, exceptions to standard practices are unlikely to be seen as justifiable. The absence of review along with the more active involvement journals will only encourage imposing a single standard for ethical treatment of human participants, that of informed consent. The result, in our opinion, will be the decreased ability to publish research which in the past was seen as involving no more than minimum risk.

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Footnotes

[1]According to the OPRR report on the protection of human subjects that serves as the guideline for IRB decisions, “A ‘minimum risk’ is the probability and magnitude of physical or psychological harm that is normally encountered in the daily lives, in the routine medical, dental, or psychological examination of healthy persons.” (OPRR, 1991, pp. 14, ' 46.303). We accept this definition throughout the paper.

[2]Although we piloted the biodata items for sensitivity, we did not for the face validity of the two sets of items. It is possible that the more sensitive items appeared less valid than the less sensitive ones. If so, this confound would not allow us to separate the effects of sensitivity from perceived validity on the ratings. However, our purpose for including sensitivity was to observe whether a characteristic of the study that was, technically, not supposed to affect judgments, would, in fact, do so. Face validity is also a factor that should not affect judgments. Therefore, regardless of whether sensitivity or the joint condition of sensitivity and lower face validity affected judgments of risk, the conclusion that factors not associated with protection of participants affected judgments of risk remains.

[3]Differences among or between samples, when they were statistically significant, accounted for between 2 and 14% of the variance.

4 The authors first individually reviewed all articles in the set to identify work conducted in field settings. Studies using student samples (e.g., MBA or executive students), child or adolescent samples, and eye-witness testimony were excluded from the present study. Any disagreement among the authors was resolved through discussion. If an individual was first author on more than one study published during this period, the individual was sent only one survey which referenced the most recent field study. Any disagreement among the authors was resolved through discussion.

Table 1

Sampling Information and Sample Characteristics

Sampling Information			Sample Characteristics		
Subsample	Mailed[a]	Returned	Mean Age	% Male	% White
IRB Members	167	71	47.97	60.6	87.3
Other Faculty	220	63	45.92	50.8	91.9
HR Professionals	216	95	39.79	35.1	94.7
Job Applicants	N/A	106	22.67	50.5	84.8

[a]Number of questionnaires mailed to sample members minus the number returned as undeliverable for reasons such as “address unknown.”

Table 2

Biodata Item Stems for The Low and High Sensitivity Conditions

Lower Sensitivity Items
1. Which of the following best represents your high school grade point average?
2. In your first full-time job, how often did you initiate conversation with your supervisor?
3. How many hours do you volunteer to community service in an average month?
4. Have you ever been fired from a job?
5. During high school, of how many organizations were you a leader?
6. To how many honor societies have you belonged?
7. Did you enjoy high school?
8. Do you often use a daily planner, date book, or other scheduling aid?
9. At what time do you usually arrive for a scheduled appointment?
10. To what degree do you keep your desk at home, work, or school clean?
Higher Sensitivity Items
1. How would you describe your weight, in comparison to others your age and gender?
2. How often do you drink alcoholic beverages?
3. Women can perform most jobs as well as men.
4. Affirmative action programs are fair and just.
5. There have been times when you have taken advantage of someone.
6. During your senior year in high school, how often did you go out on dates?
7. How many times have you taken sick leave from work or school even though you weren't really sick?
8. Would you agree with the statement: "I have some pretty terrible habits."
9. Do you often feel lonely and sad.
10. If necessary, will you manipulate people to get what you want?

Table 3

Means, Standard Deviations, and Intercorrelations Among The Dependent Variables[a]

Variable	M	SD	1	2	3	4
1. Risk	2.96	1.03	-	.64*	.56*	-.22*
2. Consent	2.65	1.05		-	.42*	-.10
3. Feasibility	3.07	0.74			-	-.30*
4. Applicant Response	2.78	0.79				

[a]N = 335
*p # .01

Table 4

Cell Means for Effects of Conditions on The Four Primary Ratings

Sample:	HR Professionals				Job Applicants				Faculty				IRB Members			
Consent:	Low		High		Low		High		Low		High		Low		High	
Sensitivity:	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low	High
Cell Size:	27	23	27	18	22	29	27	28	21	15	15	12	16	18	16	21
Ratings of:																
Consent	2.93	2.46	3.57	2.89	2.86	2.48	3.20	2.73	2.00	1.90	3.37	2.83	2.13	1.86	2.53	2.05
Risk*	3.48	2.51	3.88	2.69	3.05	2.77	3.12	2.87	3.20	2.28	3.35	2.98	2.95	2.25	3.09	2.43
Feasibility	3.26	2.51	3.49	2.46	3.17	2.82	3.04	3.02	3.52	2.49	3.36	3.14	3.46	3.13	3.29	2.90
Applicant Response	2.74	3.40	2.52	2.79	3.00	2.91	2.93	3.17	2.38	2.83	2.72	2.67	2.44	2.54	2.19	2.77

* = Higher scores indicate less perceived risk.

Table 5

Adequacy of Consent Condition Means Collapsed over Sensitivity Condition

	Consent Condition	
	Low	High
Subsample:		
Human Resource Professionals	2.71	3.30
Job Applicants	2.65	2.96
Faculty	1.96	3.13
IRB Members	1.99	2.26

Figure 1: Interaction between sample and degree of sensitivity on perceptions of risk (note: higher scores indicate less perceived risk).

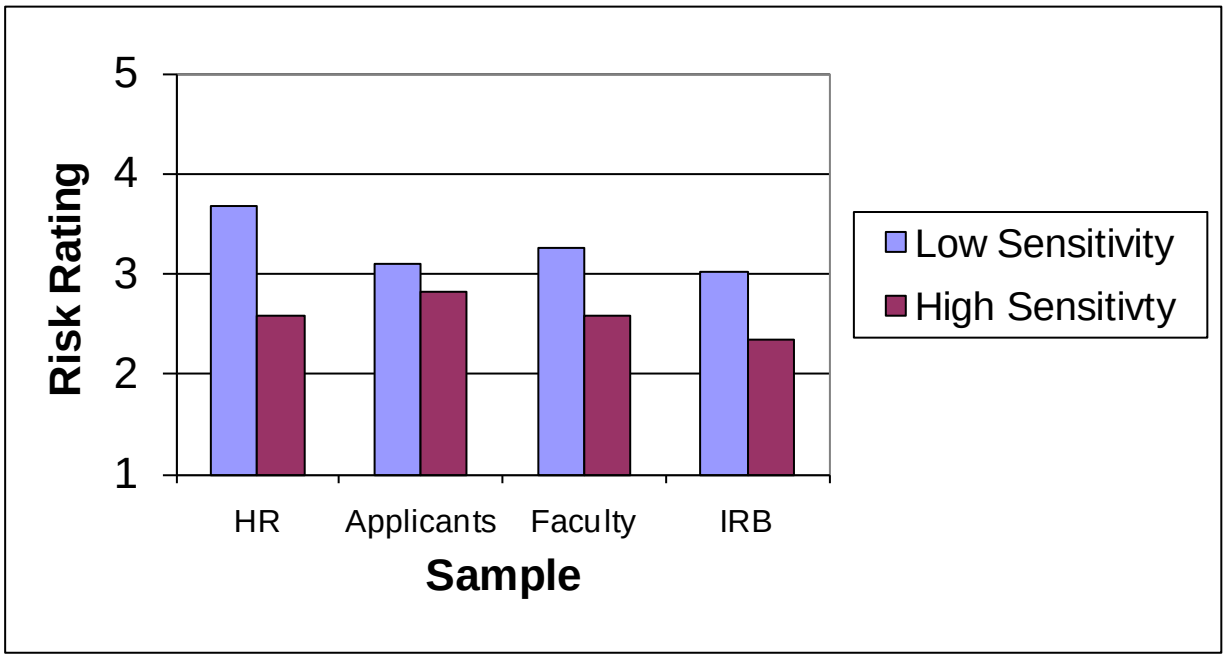

Figure 2. Interaction between sample and level of consent on ratings of acceptability of consent.

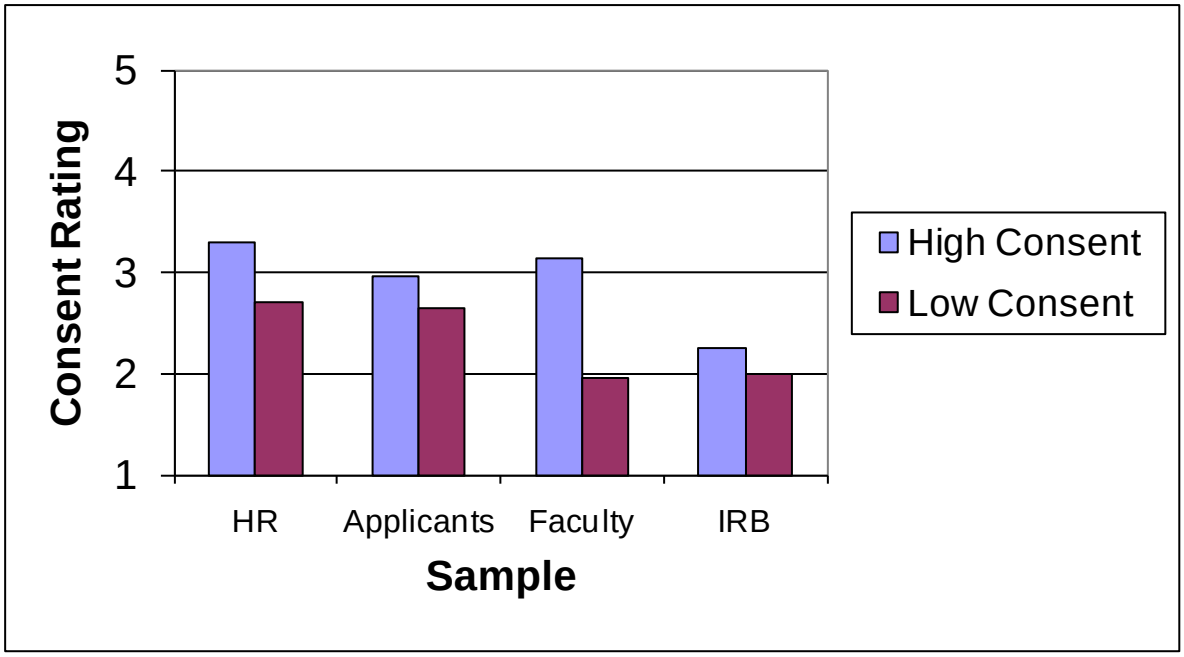

Figure 3. Interaction between sample and degree of sensitivity on ratings of feasibility.