

## Deception Methods in Psychology: Have They Changed in 23 Years?

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To learn whether criticism and regulation of research practices have been followed by a reduction of deception or use of more acceptable approaches to deception, the contents of all 1969, 1978, 1986, and 1992 issues of the *Journal of Personality and Social Psychology* were examined. Deception research was coded according to type of (non)informing (e.g., false informing, consent to deception, no informing), possible harmfulness of deception employed (e.g., powerfulness of induction, morality of the behavior induced, privacy of behavior), method of deception (e.g., bogus device or role, false purpose of study, false feedback), and debriefing employed. Use of confederates has been partly replaced by uses of computers. "Consent" with false informing declined after 1969, then rose in 1992. Changes in the topics studied (e.g., attribution, socialization, personality) largely accounted for the decline in deception in 1978 and 1986. More attention needs to be given to ways of respecting subjects' autonomy, to appropriate debriefing and desensitizing, and to selecting the most valid and least objectionable deception methods.

Key words: deception, privacy, research ethics

Has the use of deception in psychological research been reduced or otherwise made more acceptable in relation to social and regulatory events of the last two decades? During the 1960s, the use of deception became widespread in social psychology. From 1959 to 1969, the percentage of studies using deception in the leading social psychological journal, *Journal of Personality and Social Psychology*, increased from 41% to 66% (Gross & Fleming, 1982). Many psychologists regarded deception as integral to laboratory experimentation (e.g., Aronson & Carlsmith, 1968). Others urged that alternative methods be

sought, stressing the undesirability of lying and deceiving in the name of science (e.g., Hendrick, 1977; Kelman, 1967; McGuire, 1967; Ring, 1967), and the threat to validity of research due to generalized suspicion of deception by those being studied (e.g., Adair, 1973). Outside of psychology, journalists (e.g., von Hoffman, 1970) and applied ethicists (e.g., Bok, 1978) were prominent among those criticizing some uses of deception in social psychology as spying or invading persons' privacy, and as a mark against the reputation of scientific research.

### WHAT IS DECEPTION RESEARCH? WHY IS IT DONE?

To *deceive* means to cause a person to believe something that is not true. Deception, thus defined, is used in research when valid results cannot be obtained by telling subjects the real purpose of the research (see Sieber 1992, p. 64–74 for detail), as the following example illustrates.

Asch (1956) studied conformity by telling subjects that they were in a perception study in which each member of the group was to indicate which line matched the standard line. Unknown to the subject, the other seven group members were confederates. On the first two trials, most of the confederates made the correct match, but thereafter all agreed on a wrong number. Asch reports that the real subjects looked bewildered and anxious, and 33% of them gave the same wrong answer as the confederates. That is, they conformed despite what their eyes told them.

In contrast, when Wolosin, Sherman, and Mynat (1972) asked people whether they conform, they reported that they themselves are independent of group influence but recognize that many others are conformists.

Obviously, Asch's use of deception enabled him to obtain valid knowledge about human behavior that could not have been learned by more direct means. Moreover, it would have been impractical or impossible for Asch to have waited in a field setting for natural occurrences of an event of this nature; he could not have achieved adequate stimulus control or random assignment of subjects in such naturally occurring events; and he would have been unable to stop any ensuing hostilities or self-doubts.

According to the ethical principles set forth by the National Commission for Protection of Human Subjects of Biomedical and Behavioral Research (1978), it is unethical to do invalid research. Also, any risk to subjects should be minor, and justified in relation to the likely benefits of the research. Within this framework, the harm or wrong done to subjects through a particular use of deception in research must be weighed against the likely benefits of the research. How can the harmfulness or wrongfulness of a particular instance of deception be evaluated?

## WHEN IS DECEPTION ETHICALLY OBJECTIONABLE OR HARMFUL?

The word *deception* can denote many different kinds of acts. To determine whether deception methods have been reduced or made more acceptable, one must first distinguish between the various kinds of deception that may occur, analyze the potential for wrong or harm in each, and then examine the frequency of use of each kind of deception within the relevant time frame. Dimensions of deception that must be considered include (a) the kind of failure to inform, (b) the nature of the research (e.g., whether the behavior studied is socially perceived as “good” or “bad” behavior, is weakly or strongly induced, is regarded as private, and whether confidentiality is assured), and (c) the method by which people are deceived (e.g., false feedback, false purpose of the research, confederates).

### Kind of Failure to Inform

Deception in research involves some kind of failure to inform (e.g., there may be no informing, false informing, or consent to possible deception). Some approaches to not informing are less objectionable ethically and less likely to harm subjects than are other approaches. Indeed, ethically sensitive researchers have developed approaches to not informing that are highly respectful of subjects' autonomy; these are the first three approaches described in the following list. One would hope that these approaches are becoming more widely used. The basic kinds of noninforming are as follows:

1. *Informed consent* to participate in one of several specified conditions without knowing which condition will actually occur (as in placebo studies).

2. *Consent to deception*, in which subjects are warned that some deception may occur. They are told what events they will experience if they agree to participate in the study and are debriefed completely about the purpose of the study afterward.

3. *Waiver of right to be informed*, in which subjects waive informing but are not explicitly forewarned of the possibility of deception.

4. *Consent and false informing*, in which subjects believe they are engaging in a truthful informed consent procedure, but are actually misinformed about some aspect of the nature of the research.

5. *No informing, no consent*, in which subjects do not know that they are participating in research.

6. *Self-deception*, in which the aim of the research is so different from what subjects expect that they behave under incorrect assumptions. For example, in

incidental learning experiments, subjects are given a task such as learning pairs of nonsense syllables and are then tested on some attribute of the syllables such as their color.

7. *Deception by a third party*, in which the researcher observes a relationship in which someone deceives someone else; for example, in research on "therapeutic privilege" the researcher would observe physicians lying to patients when the physician believes that the truth would be harmful.

The last four approaches to deception seem more objectionable than the first three—but why? The following are ethical objections (as opposed to actual harms) that seem most pertinent to one or more of these kinds of deception:

1. *Invasion of privacy*. The researcher extracts kinds of information that subjects might not wish to reveal.
2. *No informing*. Subjects are not told what to expect regarding procedures or risks.
3. *No self-determination*. Subjects do not have an opportunity to decide whether to participate in the study.
4. *No debriefing*. The researcher does not explain the deception after the study is completed (and indeed it may be imprudent for him or her to do so).
5. *Researcher lies*. The researcher actively falsifies or misrepresents pertinent information.
6. *Researcher conceals pertinent information*.

As Table 1 indicates, the last four approaches to deception are indeed more likely to be ethically objectionable than are the first three. These strong forms

TABLE 1  
Potential Ethical Objections to Kinds of Deception

Kind of Deception	Potential Ethical Objection					
	Invades Privacy	No Consent	No Self-Determination	No Debriefing	Researcher Lies	Researcher Conceals
Informed consent	1	1	1	1	1	4
Consent to deception	3	1	1	1	1	4
Waives informing	3	4	1	2	4	4
False informing	4	4	4	2	4	4
No informing <sup>a</sup>	4	4	4	3	4	4
Self-deception	4	3	3	3	2	3
Third-party deception	4	4	4	3	2	4

Note. 1 = never; 2 = possibly; 3 = probably; 4 = always.

of deception deny people the right of self-determination. In contrast, the weaker forms of deception provide varying degrees of accurate information and are respectful of autonomy.

Much research requiring deception can be done as well with weak forms of deception as with strong. For example, one might study behavioral effects of LSD by asking subjects to participate in a fully described study; subjects would be told that they would receive either a salt tablet (placebo) or an LSD tablet but could not be told ahead of time which they would receive. Contrast this with an actual CIA study in which researchers set up an elaborate laboratory in a brothel. As clients arrived, the madam gave them drinks containing LSD. The men's behavior was then filmed from behind a two-way mirror. Subjects were never debriefed, and one committed suicide (Goldman, Clark, & Marro, 1975).

### Nature of the Research

It is not simply the approach to deception that can cause harm. Rather, it is deception in conjunction with the nature of the research. For example, Isen and Levin (1972) used "no informing, no consent" to study whether persons who were handed a free cookie were subsequently more willing to help another student who dropped books than persons who got no cookie. The "cookies" study examined positive public behavior, weakly induced, where confidentiality was not an issue. In contrast the LSD-in-a-brothel study examined negative private behavior, with a powerful induction and possible concern about confidentiality. Because it is these four dimensions, in conjunction with use of deception, that can make research harmful, these dimensions are described further here, as follows:

1. *Perception of the behavior.* The behavior studied may be (a) neutral or unlikely to evoke concern or distress—for example, whether one helps someone who drops something, (b) mildly harmful, offensive, unpleasant or undesirable, such as (perceived or actual) failure on a test, (c) quite harmful or offensive, such as committing petty theft, or inflicting some pain on others, or (d) very harmful or offensive, such as committing grand larceny, or married men visiting a brothel. The more negative the behavior, the more harmful the deception research; however, the extent of harm depends also on extent of induction and lack of privacy and confidentiality.

2. *Privacy of the behavior.* The behavior studied may be (a) public and performed for an audience to observe, (b) private behavior in a public place (observable, but not done for others to observe, as when people converse or embrace in an airport), (c) private behavior in a restricted setting, not intended for outsiders to observe, as when a scientist pretends to be a patient in order to study the behavior of physicians, (d) private, nonsecret behavior that is not

generally intended for the eyes of others, such as sexual intercourse in a married couple's bedroom, and (e) secret, private behavior. It is not simply the behavior per se but also the cultural and situational context that determines degree of privacy. For example, sexual intercourse by a supposedly celibate priest would fall into category (e); by a married couple, category (d); at a nude beach, category (c); at a regular beach, category (b); and as a scene in a movie, category (a). The more private the behavior, the greater the potential for harm, other conditions being equal.

3. *Induction of the behavior.* The behavior studied may (a) occur naturally, (b) be weakly induced, as in Isen and Levin's (1972) "cookies" study, or (c) be powerfully induced, so that people are caused to do things they would not ordinarily do.

4. *Degree of confidentiality.* Confidentiality, the agreement by the researcher to restrict the information gained from the research, is a critical means of reducing risk when negative, private behavior is studied. The data might be (a) anonymous, (b) stripped of identifiers, (c) stored out of sight, but with identifiers, or (d) available for others to see, along with names or other identifiers.

These four factors need to be considered in combination. A neutrally perceived public act such as picking up litter (or not doing so), even if highly induced, will cause no harm even if not kept confidential, but a negatively perceived act such as drug use should not be induced, and confidentiality is critical. In conclusion, deception research raises special ethical concerns when it involves induction of behavior that is private or perceived as negative.

### Topic of the Deception

Subjects may be deceived about various kinds of things:

1. They may be given, or be caused to hold, false information about the main purpose of the study.
2. They may be given false information concerning stimulus materials (bogus devices). For example, in the Milgram deception research (1974), subjects were led to believe that the apparatus they used actually shocked subjects.
3. The use of a confederate may cause them to misunderstand the actual role of some individual (role deception).
4. They may be given false feedback about themselves.
5. They may be given false feedback about another person.
6. They may be kept unaware of being subjects in research.
7. They may be unaware that a study was in progress at the time of manipulation or measurement, or unaware of being measured (e.g., video-taped).
8. Two related studies may be presented as unrelated.

None of these deceptive events is necessarily unethical or harmful; for example, the popular of TV show *Candid Camera* employed all of these devices and was not regarded by the public as wrong or harmful. But in conjunction with certain other aspects of deception, these deceptive events may be harmful or unethical.

### Debriefing

Finally, the deception and its effects may be undone or not. Debriefing has two possible parts. *Dehoaxing* means explaining what really happened. *Desensitizing* means removing any emotional harm, thus returning the person to at least as good a condition as before the study. Unfortunately, dehoaxing is not always possible, feasible, or harmless, and it is not always obvious what emotional harm remains or how to remove it (Holmes, 1976).

In summary, deception in research has manifold meanings and implications. Some instances of deception in research are unethical or harmful, while others are not. What, then, is the position of professional and regulatory bodies concerning the ethics of deception in research?

## REGULATORY AND ETHICAL VIEWS ON DECEPTION

In 1966, the board of directors of the American Psychological Association (APA) appointed an Ad Hoc Committee on Ethical Standards in Psychological Research. This committee gathered empirical data on ethical problems arising in psychology, formulated ethical principles, and circulated the proposed principles widely throughout psychology prior to their final adoption in 1972. For a description of the process of code formulation, circulation, and revision, see *Ethical Principles in the Conduct of Research With Human Participants* (APA 1982).

Also in 1966, Surgeon General William Stewart initiated an institutional review requirement at the Department of Health, Education, and Welfare (DHEW), and a clarification of that policy stating that it referred to all investigations funded by the Public Health Service (PHS) that involved human subjects, including those in the behavioral and social sciences. By 1973, DHEW regulations governing human research were promulgated, requiring review by an Institutional Review Board (IRB) and informed consent of subjects. These requirements were extended by the National Research Act of 1974 to all research involving human subjects conducted at institutions that receive funds under the Public Health Service Act. See Gray (1979) for discussion of the development of regulations and human subjects review committees.

Both the APA code of ethics and the federal regulations stress the importance of consent and noncoercion, but also recognize that some research

cannot be conducted validly with complete disclosure of purpose. For example, in Principle D, the 1972 APA code (APA, 1982) states:

Except in minimal-risk research, the investigator establishes a clear and fair agreement with research participants, prior to their participation, that clarifies the obligations and responsibilities of each. The investigator has the obligation to honor all promises and commitments included in that agreement. The investigator informs the participants of all aspects of the research that might reasonably be expected to influence willingness to participate and explains all other aspects of the research about which the participants inquire. Failure to make full disclosure prior to obtaining informed consent requires additional safeguards to protect the welfare and dignity of the research participants. Research with children or with participants who have impairments that would limit understanding and/or communication requires special safeguard procedures. (p. 32)

The 1972 APA code (Principle H) also emphasizes debriefing:

After the data are collected, the investigator provides the participant with information about the nature of the study and attempts to remove any misconceptions that may have arisen. Where scientific or humane values justify delaying or withholding this information, the investigator incurs a special responsibility to monitor the research and to ensure that there are no damaging consequences for the participant. (p. 63)

APA's most recent revision of the code of ethics (APA, 1992) departs little from the spirit of the 1972 version, except in its more emphatic requirement of debriefing (6.15(c)).

With deception methods criticized within and outside of psychology, and with federal regulations and the APA code of ethics in place requiring informed consent and permitting deception only under special circumstances, one would expect a decline in the use of deception. However, Gross and Fleming (1982) examined 1,188 articles published in four leading social psychology journals between 1959 and 1978 and categorized them according to use and type of deception. They found that deception did not decrease between 1969 and 1978.

Gross and Fleming (1982) have been cited as showing that federal regulations, IRBs, the APA code of ethics, and psychologists' criticism of deception methods have had no impact on the use of deception in research (e.g., Saks & Melton, in press). Some important questions about the use of deception remain to be answered, however:

1. Does the incidence of deception research appearing in journals in 1979 reflect research still in the pipeline from a prior era? Federal regulations

pertaining to all (even nonfunded) research conducted in institutions receiving federal funds were just being enacted in 1974. It is likely that some of the research being published in 1978 was just being designed as the regulations were changing? Nondeceptive social psychology would require major rethinking of methods. If changes were occurring, perhaps 1978 was too early to look for them.

2. Have the topics of social psychological research changed substantially in the last two decades? If so, has this change been to phenomena that are more readily studied without use of deception?

3. If "deception research" is still about as prevalent, have the approaches to deception become less objectionable? Given the need to use deception for certain types of research (e.g., on conformity, altruism, aggression), perhaps the incidence of deception would not be expected to decline as much as would the choice of deception methods. As discussed above, some deception methods are more objectionable than others. It would be unfortunate if criticism of deception methods caused psychologists to stop studying some important phenomena. A more desirable outcome of criticism is for researchers to employ the least harmful or wrongful method of deception that yields valid, nontrivial knowledge.

4. Procedures have been developed for obtaining consent to participate in research involving deception. These methods permit subjects to decide whether to participate in research in which some concealment or deception is likely. Has there been an increase in such approaches to consent? Have researchers become more conscientious about debriefing (dehoaxing and desensitizing)?

5. Has the harmfulness or riskiness of deception research decreased over the last two decades?

## METHOD

### Overview

To estimate what changes have occurred in the use of deception in mainstream published social psychological research over the last two decades, all journal articles published in the *Journal of Personality and Social Psychology (JPSP)* were examined for the years 1969, 1978, 1986, and 1992. Because *JPSP* is the leading journal in its field, the studies published there exemplify the most rigorous research in social and personality psychology. Hence they may be regarded as exemplifying both the ethical norms of the field's most prestigious researchers and the expectations of the field's most critical reviewers and editors.

## Measures

The following measures were taken. First, the percent of articles employing deception was determined. Then the main topic of study of each article was determined and the relative frequencies of the topics were tabulated. The pertinent topics were: achievement, aggression, altruism, attitude/attitude change, attraction/affiliation, attribution, bargaining/coalition formation, communication, compliance/conformity, cooperation/competition, cross-cultural, dissonance/consistency, emotion, environmental, equity, groups/group processes, impression formation, memory, nonverbal communication, personality, self-awareness, self-disclosure, sex roles/sex differences, socialization, decision making, interpersonal relationships, stress/coping, drug abuse, cognition, stimulus recognition. (The last six topics were deemed necessary for coding the 1992 articles.) Many of the articles coded represented more than one topic; in these cases, the main descriptive topic was indicated. Where two or three topics were equally relevant, each topic received an equal fraction of credit for that one topic; the resulting frequency data by topic and year are rounded off to the nearest whole number in the tabular presentations that follow. A few of the studies would have been more accurately characterized by an additional topic, but the purposes of this research were better served without proliferation of categories. Independent coding yielded about 80% consistency; the majority of inconsistencies occurred when one or more coder was unsure which of two or more topics should be considered the main descriptive topic; discussion to consensus was used to resolve these coding inconsistencies.

Last, articles were coded according to the *kind of failure to inform* (the seven kinds described in this article), the *method* of the deception (the nine methods described in this article), whether *debriefing* or *desensitizing* occurred, and the *nature* of the research (the four kinds described in a previous section of this article and detailed here):

1. *Social perception of the behavior.* How the behavior studied would be regarded by most members of society: 1 = positive or neutral, 2 = mildly negative, 3 = negative, 4 = very negative.
2. *Privacy of the behavior.* 1 = public behavior, 2 = private behavior occurring in a public place, 3 = private behavior in a restricted setting, 4 = private, but nonsecret behavior, 5 = private, secret behavior.
3. *Induction of the behavior.* 1 = naturally occurring behavior, 2 = weak induction, 3 = powerful induction.
4. *Confidentiality of the research.* 1 = anonymity, 2 = high confidentiality, 3 = low confidentiality, 4 = no confidentiality.
5. *Upset likely to be caused by the research.* Upset to subjects may be caused by what they thought happened in the research, or by debriefing that leaves them feeling foolish, incapable of independent judgment, or feeling that their

environment is untrustworthy. Upset to people who learn about the study may arise out of concern that science would condone a dishonest or harmful procedure. Investigators, assistants, and confederates may experience upset because of their involvement in the deception. Each of these forms of deception was rated 1 = no upset seems likely, 2 = mild upset seems likely, and 3 = substantial upset may probably be expected.

### Training and Reliability

Raters were the first author and four mature women who were seniors in undergraduate psychology. Raters were trained and then supervised during their initial rating experience so that any questions could be answered and rating errors corrected. The rating system was based on the taxonomy of deception approaches described in detail in Sieber (1982; 1983). After the training, raters worked independently, then compared independent ratings to discover any inconsistencies. Very few inconsistencies were observed, and these were easily resolved by reference to the rules of the coding system.

## RESULTS AND DISCUSSION

1. Was 1978 too early to look for reduction in the amount of deception research being published?

The percentage of studies employing deception in the *Journal of Social and Personality Psychology* (JPSP) during each of 4 years differs, as shown in Table 2.

Percent of deception studies went from 66% (1969) to 47% (1978), to 32% (1986), but back up to 47% in 1992! What does this dramatic downswing and upswing mean? The overall number of deception studies remained about constant, but the total number of studies published increased steadily through 1986. Are the changes in percentage of deception due to changes in the kinds of topics studied, or to amount of deception employed on comparable sets of topics?

TABLE 2  
Deception in Research Published in JPSP in 1969, 1978, 1986, and 1992

Year	Number of Studies Not Using Deception	Number of Studies Using Deception	Percent of Studies Using Deception
1969	45	87	65.9
1978	83	73	46.8
1986	192	89	31.7
1992	80	70	46.7

2. Have the topics of research changed to phenomena more readily studied without use of deception?

To discover whether the observed decline and subsequent increase in deception studies was due to changes in methodology or to changes in topics studied, a matrix was developed showing the number of studies involving and not involving deception for each topic. Five topics that rarely involve deception were found to have become very popular in 1978 and 1986, and account for some of the observed decline and subsequent increase in deception studies. These topics are attribution, environmental psychology, sex roles and sex differences, socialization, and personality. The use of deception and nondeception for these topics over the years sampled is shown in Table 3.

Table 2 indicates that *JPSP* grew in number of studies published per year over the first 3 years studied, with a slight decline in numbers, finally, in 1992. However, Table 3 indicates that much of that growth, and subsequent decline in 1992, is accounted for by changes in the publication rate of studies on the topics of attribution, environmental psychology, sex roles and sex differences, socialization, and personality. Moreover, these topics usually were studied without the use of deception. Table 4 shows the percent of deception studies by year for the five topics shown in Table 3, for all topics, and for all topics except the five shown in Table 3.

Table 4 reveals that when the five topics of research—attribution, environmental psychology, sex roles and sex differences, socialization, and personality—are removed from consideration, the percent of deception studies shows much less decline between 1969 and 1986. In 1986, when the percentage of deception studies declined most markedly, there was an enormous increase (relative to the other years) in research on attribution, environment, sex roles and sex differences, socialization, and personality; moreover, these topics were even less often studied with use of deception in 1986 than in other years.

Thus 1986 was a year in which both the topics and the use of deception

TABLE 3  
Number of Studies Involving Deception (D) and Nondeception (N), and Total Studies (T)  
for Five Topics by Year

	1969			1978			1986			1992		
	N	D	T	N	D	T	N	D	T	N	D	T
Attribution	4	7	11	22	8	30	19	7	26	7	7	14
Environmental	2	3	5	6	5	11	31	7	38	9	4	13
Sex roles	0	1	1	3	5	8	13	7	20	4	1	5
Socialization	1	3	4	4	3	7	18	3	21	3	3	6
Personality	6	1	7	6	6	12	43	10	53	21	11	32
Totals	13	16	29	41	27	68	124	34	158	44	26	70

TABLE 4

Percent of Deception Studies by Year, With and Without the Five Topics, and for the Five Topics Only

	<i>Percent of Deception Studies</i>			
	<i>1969</i>	<i>1978</i>	<i>1986</i>	<i>1992</i>
For the 5 new topics	55	40	22	37
For all topics	66	47	32	47
For all but the 5 new topics	69	52	44	55

within topics changed to yield a considerable reduction in overall use of deception. In contrast, 1992 saw a reduction in number of studies published, an even more marked reduction in the particular five topics of study in which deception tends not to be used, and, even within these five topics, an *increase* in the use of deception! Clearly, then, changes in both topic and method account for the observed differences in overall use of deception.

3. If deception research is still about as prevalent, have the approaches to deception become less objectionable?

To fully interpret the meaning of the decline and subsequent increase in use of deception, it is necessary to examine the frequency of use of the various methods of deception and approaches to informed consent over the four periods studied. Table 5 shows the percentage of deception studies in each year that employ each of the eight methods of deception described above.

Table 5 reveals a pattern of usage of the various methods of deception that is consistent with the generalizations developed based on Tables 2, 3, and 4. Most methods of deception decreased during the second and third periods and increased again in 1992. For example, giving false information about the main purpose of the study declined to half as often by 1986 and then rose again in

TABLE 5

Percentage (and Number) of Deception Studies Published in *JPSP* by Year and Type of Deception

<i>Type of Deception</i>	<i>1969</i>	<i>1978</i>	<i>1986</i>	<i>1992</i>
False purpose	.438 (57)	.219 (34)	.211 (59)	.343 (53)
Bogus device	.208 (27)	.090 (14)	.157 (44)	.433 (65)
Role deception	.246 (32)	.232 (36)	.114 (32)	.100 (15)
False feedback re self	.115 (15)	.045 (7)	.057 (16)	.127 (19)
Unaware of measure	.053 (7)	.077 (12)	.021 (6)	.040 (6)
Two related studies	.061 (8)	.019 (3)	.057 (16)	.053 (8)
False feedback re others	.123 (16)	.045 (7)	.054 (18)	.000 (0)
Unaware study	.069 (9)	.116 (18)	.064 (18)	.007 (1)

1992. The number of cases on which these percentages are based remained relatively constant, indicating that changes in research topics (e.g., socialization, see Tables 3 and 4), rather than changes in deception methods (e.g., false feedback), account for most of the observed differences.

There was a continuous decline over the four periods studied of use of confederates or actors, or of other forms of role deception. Correspondingly, there was also a decline in amount of false feedback about confederates or other persons. However, there was an increase in the use of bogus devices. This was largely due to the increased use of computers in the laboratory to simulate other kinds of events. Correspondingly, there was an increase in the amount of false feedback to subjects about those events.

Over the 4 years studied, there were relatively few studies each year in which subjects were unaware of being in research or unaware of measurements being taken (e.g., tape recorded, or observed through a two-way mirror), or in which two related studies were presented as unrelated. Hence the weak trends over years for these kinds of deception cannot reasonably be interpreted.

4. Has there been an increase in the use of consent procedures that respect the autonomy of research participants, and in the use of debriefing?

The requirement of informed consent, coupled with the need to deceive or withhold information in some kinds of research, has brought forth various suggestions of ways to obtain informed consent in deception research. Subjects may give *informed consent* by agreeing to participate in one of various clearly described conditions (as in a placebo study) with complete debriefing afterward. Alternatively, subjects may *consent to possibly be deceived* or *consent to waive informing*, again with the understanding that they will be debriefed later.

Less savory approaches to consent in deception research include *consent with false informing* and *no informing and no consent*, as when subjects do not know that research is occurring. *Self-deception* occurs when people are studied who hold idiosyncratic views, or at least views different from those of the researcher, and fail to understand that their views are being critically examined. For example, a researcher might fail to tell subjects who believe in ESP that their beliefs are being studied from a position of skepticism.

One might expect that the use of more ethical approaches would increase over the four periods studied and that the less savory approaches would decrease. Unfortunately, many of the publications used in this research were unclear about what was and was not said to subjects in the consent process or at the outset of their participation. The data reported here are based on what appeared in the publication, and may not accurately reflect the actual consent process (or lack thereof). In any case, Table 6 indicates that consent to decep-

TABLE 6  
 Percentage of Studies Published in *JSPS* by Year Employing the Given Approaches to  
 Consent

<i>Kind of Consent</i>	1969	1978	1986	1992
Informed consent	.038 (5)	.059 (9)	.061 (17)	.373 (54)
Consent to deception	.000 (0)	.000 (0)	.000 (0)	.000 (0)
Waive right to be informed	.007 (1)	.000 (0)	.000 (0)	.000 (0)
Consent and false informing	.561 (73)	.335 (52)	.250 (70)	.407 (61)
No informing, no consent	.062 (8)	.084 (13)	.007 (2)	.020 (3)
Self-deception	.015 (2)	.000 (0)	.007 (2)	.000 (0)
Deception by third party	.015 (2)	.013 (2)	.000 (0)	.007 (1)

tion and consent to waive informing never took hold as an approach to the consent issue. On the bright side, informed consent (consent to participate in an undisclosed one of several fully described studied) increased steadily and was a major method by 1992. However, the least savory approach, the outright lie—consent and false informing—first decreased after 1969, then rose abruptly in 1992.

Debriefing was more frequently mentioned after 1969, suggesting that researchers have become slightly more aware that it is an important element of deception research, worthy of mention in the published report. Otherwise, there seem to be no notable temporal trends in the data. Indeed, changes in the pattern of debriefing are difficult to interpret because most of the deception studies published in each of the four years made no mention of debriefing or desensitizing.

##### 5. Has the harmfulness or riskiness of deception research decreased over the last two decades?

Studies were coded according to possible harmfulness of the deception, and no trends were noted in the data. Mean scores, overall, for each variable were as follows: social perception (1.5—neutral to slightly negative), privacy of behavior (2.3—a mixture of public and private behavior mostly observed in public or restricted settings), induction of behavior (1.2—mostly naturally occurring behavior, and some use of weak induction), confidentiality (1.35—mostly anonymous or highly confidential), upset due to participation (1.5—mostly no upset or mild upset likely), upset due to debriefing (1.9—mild upset likely), upset due to knowledge of the research (1.1—upset generally unlikely), and upset to researchers (1.4—no upset to mild upset in most cases). These findings are hardly surprising, and assure us that for each period, from 1969 to 1992, most of the research was unlikely to upset or harm anyone.

## CONCLUSIONS AND RECOMMENDATIONS

Over the past two decades, the social science community has come under scrutiny by the general public and governmental bodies. On the basis of this level of concern, it would seem that social scientists would seek to use less objectionable methods. The purpose of this study was to discover whether psychologists have altered their methods of conducting science—in particular, whether their use of deception has been reduced or otherwise made less objectionable.

Although the regulatory events of the early 1970s appear to have been accompanied by some changes in the use of deception, the changes are not exactly as one might expect. Uses of confederates and other kinds of role deception tended to be replaced by uses of computers and other kinds of bogus devices to provide false impressions to subjects. Research generally requiring deception, prevalent in 1969, tended to be supplemented extensively with research in areas such as socialization, personality, sex differences, environmental psychology, and attribution, where the use of deception is often unnecessary. However, by 1992, the percentage of deception studies conducted in *these* five areas increased to 37% as compared to 22% in 1986, and the percentage of deception studies conducted in the rest of the areas increased to 55%, as compared to 44% in 1986. “Consent” with false informing was highly prevalent in 1969, subsequently declined, and then rose sharply in 1992. False feedback to subjects about themselves or their performance followed the same pattern, rising to its highest point in 1992.

On the basis of what authors have stated about their consent procedures, they have not begun using methods that are respectful of subjects’ autonomy. However, many articles failed to mention what was said, if anything, in the consent or debriefing/desensitizing phases of research. Given the importance of building due respect for social science, the omission of published detail on this aspect of research is unfortunate.

One wonders what ethical oversight, if any, accompanied some of the studies included in the present research. Because some IRBs take reactionary attitudes towards deception, even when it is essential to the study of a topic, it is conceivable that some researchers are tempted to illegally circumvent their IRB. However, many other IRBs are competent to help researchers design valid studies using the least harmful or objectionable deception methods (see Sieber, 1982, 1983).

Similarly, competent and ethical researchers can do much to educate IRBs. For example, IRBs need to know what kinds of consent procedures may threaten validity. They also need to understand more about risk/benefit determinations that may justify deception research in the social and behavioral sciences. It is accepted that epidemics and life-threatening illnesses may warrant greater risk taking in biomedical research than would otherwise be allowa-

ble. Are IRBs willing to apply similar criteria to social and behavioral research? For example, the current epidemic of violence, HIV infection, and teen pregnancy—which are social and behavioral problems—may call for research that compromises full informing and consent in order to obtain valid and useful information.

In contrast to the doctrinaire position that deception research is always morally wrong, most researchers recognize four circumstances under which deception may be justified. How, for example, would one study responses to various styles of aggression in a manner that uses random assignment to conditions, that creates definable observable conditions within a time frame in which these can be studied, that controls the aggression so that subjects are not hurt, and that permits debriefing so that subjects may gain insight into their own behavior? Deception methods may be the only viable way to accomplish the following:

1. To achieve stimulus control or random assignment of subjects to conditions.
2. To study responses to low-frequency events.
3. To obtain valid data without serious risk to subjects.
4. To obtain data that would otherwise be unobtainable because of subjects' defensiveness, embarrassment, shame, or fear of reprisal.

An indefensible rationale for deception is to trick people into research participation they would find unacceptable if they correctly understood what it was about. To be acceptable, deception research should not involve people in ways that members of the subject population would find unacceptable. An effective way to determine whether members of the subject population would find the research acceptable is to relate the purposes and procedures of the proposed study to surrogate subjects and learn whether they find these acceptable.

Regulators and IRBs, instructors of methodology, and journal editors influence the way research is done. For some of the gatekeepers the emphasis is primarily on protecting the rights of subjects and secondarily on validity; for others, the priorities are reversed. The general lack of dialogue between these various gatekeepers is unfortunate. Why are more creative approaches to consent not employed? Why do editors not require mention of critical aspects of consent and debriefing/desensitizing employed? Do researchers know how their subjects feel about the various deception procedures employed? What are the most serious threats to validity in deception research? Do current approaches to deception research effectively reduce these threats? Are regulators (IRBs) responsive to rational reasons for employing deception? Do regulators and researchers know how to select the most effective and least harmful or wrongful kind of deception when deception is required?

Are teachers of research methodology responsive to these issues?

In answer to the question posed at the beginning of this article, it is apparent that deception research is not a thing of the past. It is very much with us, and perhaps increasing. What impact will this have on the reputation and conduct of research? In the last three decades, the reputation of science has been considerably tarnished. The public no longer attributes strictly virtuous motives to scientists. Although criticisms such as those being leveled in the 1960s and 1970s at the ethics of social psychologists are rarely heard today, social psychology, like the rest of science, can ill afford further degradation of its reputation. Our methodology is not necessarily wrong, but further dialogue among scientists and their gatekeepers is needed to determine whether it can be improved.

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