

Ethical Issues in the Use of the Bogus Pipeline¹

HERMAN AGUINIS² AND MITCHELL M. HANDELSMAN

University of Colorado at Denver

This article addresses the ethics of utilizing the bogus pipeline (BPL) procedure in social psychological research. A debate is presented between 2 positions: One challenges the use of the BPL based on ethical principles, and the other confronts these challenges. The debate addresses the void in previous BPL literature regarding concerns about the ethics of using this technique, and raises awareness about potential ethical dilemmas faced by BPL users. The BPL is discussed from utilitarian and deontological ethical perspectives.

Jones and Sigall (1971) first suggested the bogus pipeline (BPL) as a technique to minimize the social desirability component of traditional self-report measures in social psychological research. The BPL comprises a set of procedures that lead respondents to believe that researchers have a powerful, sophisticated, and practically infallible lie detector. In actuality, the supposed lie detector is not real. Because respondents do not want to be second-guessed by a machine, they may be motivated to provide more honest self-reports.

Social psychologists have been enthusiastic about the BPL procedure, especially those interested in collecting sensitive information such as attitudes on racial issues (e.g., Sigall & Page, 1971). More recently, applied social psychologists have adopted the BPL to measure drug use with self-report questionnaires (Murray & Perry, 1987). Three recent meta-analytic reviews of the BPL literature (Aguinis, Pierce, & Quigley, 1993, 1995; Roese & Jamieson, 1993) reflect an increased interest in, and implementation of, the BPL in social psychological research.

Despite the existence of more than 60 published studies using the BPL, this literature is surprisingly silent about ethical considerations pertaining to the implementation of this technique. Although Ostrom (1973) questioned the use

¹We thank two anonymous reviewers for their helpful comments on previous drafts. Portions of this article were presented at the meetings of the American Psychological Society (New York, NY, July 1995) and the Rocky Mountain Psychological Association (Boulder, CO, April 1995).

²Correspondence concerning this article should be addressed to Herman Aguinis, Department of Psychology, University of Colorado at Denver, Campus Box 173, P.O. Box 173364, Denver, CO 80217-3364. e-mail: haguinis@castle.cudenver.edu. <http://www.cudenver.edu/~haguinis>.

of the BPL from an ethical standpoint shortly after the technique was initially introduced, this issue has been thereafter ignored. Roese and Jamieson (1993), for example, briefly discussed ethical considerations only in a footnote, and Aguinis et al. (1993, 1995) did not address the question at all.

The void in the literature regarding the ethics of the BPL is surprising because the use of the BPL raises ethical issues that go beyond those present in more typical deception studies (see Baumrind, 1985, for the ethical issues commonly raised in research using deception in general). For example, in more typical deception studies, researchers generally mislead subjects by omission or by not revealing the whole truth about the methodology and procedures (Greenberg & Folger, 1988). On the other hand, researchers who use the BPL not only conceal the truth, but actively lie to participants not only about the purpose of the study, but about the nature and effectiveness of the "lie-detector" procedure. Second, participants in BPL studies may feel coerced into revealing sensitive information that is personal, such as marijuana smoking. Because some of such personal behaviors are illegal, the information gathered in studies using the BPL may be self-incriminating, and this poses a special threat to participants. Third, by forcing subjects to recognize truths about themselves (e.g., racism, sexism), study participants may feel distressed and may suffer harmful psychological consequences. For some people, adjustment and psychological balance are reached by denying that certain items apply to themselves, such as extreme attitudes including racial prejudice (Ostrom, 1973). The more typical deception research does not typically raise participants' awareness regarding these sensitive issues. Fourth, many BPL studies use samples of children as opposed to college students or adults. Children may be particularly susceptible to psychological harm. Finally, participants in BPL studies may feel coerced into providing the information requested (e.g., alcohol ingestion behavior) and effectively lose the freedom to avoid answering the question by providing false information. Thus, in BPL studies, participants may effectively lose the ability to withdraw from the study voluntarily.

The present article examines the ethics of using BPL procedures from utilitarian (consequence-based) and deontological (duty-based) perspectives. Following a long tradition in philosophy (Plato, ca. 380 B.C./1992) as well as in psychology (Lord, 1953) of presenting controversial issues in a dialogue format, we present a debate between two different positions: One ("A") challenges the use of the BPL based on ethical standards (cf. Baumrind, 1985; Kelman, 1967), and the other ("B") responds to these challenges (cf. Christensen, 1988; Sharpe, Adair, & Roese, 1992). We begin the debate with the premise that "A" and "B" hold different positions regarding the use of the BPL; "A" adopts a deontological perspective, and "B" has a more utilitarian view. These could be considered likely positions to be adopted by social psychologists on this issue. In addition,

we believe a dialogue format is more appropriate than a normative/prescriptive format for elucidating the controversial issue of the ethics of using the BPL.

In sum, the objectives of this article are: (a) to address the void in the social psychological literature using BPL procedures regarding concerns of the ethics of using this technique, (b) to discuss in detail ethical issues associated with the use of the BPL in attempting to enhance the validity of self-reports, and (c) to raise awareness among researchers who utilize or plan to utilize the BPL regarding potential ethical dilemmas.

Utilitarian Perspective

A: Utilitarians need to justify any behavior or practice by weighing the benefits to be derived against the costs or risks, including deception and other “wrong-making” features. Are there any practical benefits of using the BPL?

B: Yes. There is a demonstrated need, and there are practical benefits associated with the BPL. We need self-report information on various socially undesirable behaviors and attitudes including cigarette smoking, drug and alcohol consumption, and numerous social psychological variables such as racism (e.g., Schlenker, Bonoma, Hutchinson, & Burns, 1976), interpersonal attraction (e.g., Page & Moss, 1975), and attitude change (e.g., Gaes, Kalle, & Tedeschi, 1978). This information is utilized (a) for research purposes, that is, to gain knowledge about the relationships between these and their antecedent and consequent variables; and (b) for intervention purposes. First, if we do not have valid reports about various attitudes and behaviors, when we try to correlate them (e.g., prejudice, smoking behavior) with other variables, we will undoubtedly obtain inaccurate results. Thus, from a utilitarian perspective, unless we have valid measures of these behaviors, we will not be able to find their antecedents, consequents, and correlates. We can learn about variables related to these behaviors only if we have valid measures. Second, once a specific population has been identified as being at risk, we can design appropriate intervention programs, such as smoking cessation programs.

A: I agree that the production of knowledge is important, but your answer raises questions about deception that Baumrind (1964, 1971, 1985) and others (e.g., Dresser, 1981; Goldstein, 1981; Kelman, 1967; Sieber, 1982) have discussed. From a utilitarian perspective, the damage done to the profession by routinely lying to subjects far outweighs the

gains we make in knowledge (cf. Kelman, 1967; Orne, 1962). In regard to research, simple knowledge of correlations is not worth creating the reputation of psychologists as people who will routinely lie in order to find out interesting information. And the BPL can be considered an especially egregious form of deception, because it involves lying to study participants about both the purposes and the procedures involved.

In regard to your second point, let's be honest with ourselves about the practical benefits of our research. We know that people smoke, and we can design treatments for those people who want to stop without tricking people who do not want to admit a problem and who will not accept treatment anyway.

B: I believe your comment is very interesting, yet based on speculation. Are there any data to support the statement that using BPL procedures produces any damage to the profession? How much damage is being done? For example, empirical research on deception in general suggests that study participants do not perceive deception as an aversive, undesirable, or unacceptable procedure (Christensen, 1988; Sharpe et al., 1992). In addition, if there is any damage at all resulting from using the BPL (which is a question that first needs to be empirically investigated), I could argue that if subjects are appropriately debriefed, they will understand why deception needed to be utilized (Smith & Richardson, 1983). For example, Jones and Sigall (1971) reported anecdotal data that participants in their BPL study were not distressed at all after being debriefed; Gerdes (1979) found that subjects participating in a BPL experiment were no less willing to recommend the study to a friend than were subjects in an experiment with a much milder degree of deception (e.g., reading fabricated newspaper articles); and Howard, Millham, Slaten, and O'Donnell (1981) reported that subjects were "amused by the deception" (p. 92)! I do not think that the data available thus far suggest that there is much "damage" done.

A: There have been several studies that found that deceived experiment participants show decreased trust (e.g., Fillenbaum, 1966; Ring, Wallston, & Corey, 1970), decreased compliance, and increased negativistic behavior (e.g., Fine & Lindskold, 1971, as cited in Baumrind, 1985; Silverman, Shulman, & Wiesensthal, 1970), even in the presence of debriefing procedures. Also, the seminal work by Holmes (1976a, 1976b) revealed that debriefing was not as effective as originally thought in terms of mitigating negative attitudes caused by deceptive methodology.

B: I recognize the work by Holmes and others. However, I believe that the amount of damage done to the profession by using the BPL (as opposed to other deceptive procedures on which research has been conducted; e.g., Milgram, 1964) needs to be measured and quantified before we can say that it is large or small. We do not know whether those results generalize to the BPL, which is an interesting hypothesis that needs to be tested. Until we gather some evidence about it, it remains just an interesting question. On the other hand, the benefit of using the BPL in social psychological research is empirically supported (Roese & Jamieson, 1993): The effect size (d) across a large number of studies is .40 (almost half a standard deviation!). Thus, using the BPL yields more veracious self-reports. This is quantified, and empirically tested: There is a benefit to using the BPL.

A: We will get to the issue of benefits, but first we can agree that before the BPL is used, it is necessary to measure the damage it may do. Let us leave the issue of damage to participants and to the profession with the following questions: (a) Would you want your children to be subjects in these procedures? and (b) Would you feel comfortable telling your children's elementary school class that your job is to "lie to people so that they tell the truth about smoking"?

B: But think of the lives that can be saved, the health care costs reduced by the treatment of smoking-caused cancers and other diseases, and the theories that can be discovered because we have more valid self-reported information on various behaviors and attitudes! Can deception outweigh the fact that teenagers may quit smoking and thus prevent future health problems? Can't the potential harmful effects of using the BPL be mitigated by a good debriefing procedure, explaining why deception was needed? These are empirical questions that could be investigated before we actually state that the procedure is unethical. Similar studies have been conducted in the past regarding deception in general, for example, as follow-ups to Milgram's (1964) studies (see also Christensen, 1988, for a review of empirical work on participants' reactions to deception in general; and see Sharpe et al., 1992, for a comparison of participants' reactions to using deception between 1970 and 1989).

A: The benefits you state are all long-term and speculative. The benefits accrue to people *other* than the subjects in the actual studies, and these are the people who are subject to some degree of immediate damage.

And let's be reasonable about the claims made for our research: First of all, the BPL does not save lives! And there is little benefit from offering people who do not wish to acknowledge their smoking the chance to be treated; they will refuse. And, in general, treatment for smoking is not very effective. On average, only about 25% of those who receive any kind of treatment actually quit smoking (Viswesvaran & Schmidt, 1992). Accurate self-reports of smoking behavior have no bearing on the effectiveness or ineffectiveness of treatment.

B: There may be greater benefits if we could accurately detect smokers. And, remember, these numbers represent lives. A 25% success rate may not mean much in other areas of research, but if 25% of 10,000 teenagers quit smoking, then this becomes an important issue. If we are dealing with large numbers of people, I would say that even a 1% success rate is meaningful. Also, unless we have valid measures of smoking (e.g., BPL), we cannot accurately evaluate the success of these treatments.

However, I agree with your first point. The BPL does not save lives. Detecting risky behaviors is not the same as treating them. But, if you use self-reports alone, you do not detect nearly as many smokers as you would if you use the BPL. Thus, after using the BPL you *know* whether to offer treatment or not.

A: You are implying that in order for the BPL to be ethically justifiable, there needs to be some immediate benefit to the research participants. I would agree, and therefore assert that basic research using the BPL is unethical because there are not benefits to the participants that outweigh the risk of damage. But let's save our discussion of basic research for a while.

Even in applied social psychological research with the direct goal of helping people (e.g., action research; Aguinis, 1993; Chisholm & Elden, 1993), the consequences of deception need to be carefully considered. Participants may not trust researchers or other professionals as much after they are debriefed, and thus the results of the intervention may not be effective.

B: If you do not use the BPL, you will not even contemplate offering treatment because you erroneously think that there are no substance abusers (or just a few) among your respondents. Thus, if you use the BPL, at least you know that you may have to offer the treatment.

Without the BPL you will walk out of the data collection site with the very encouraging and very incorrect conclusion that you do not need an intervention program because there are no (or just a few) substance abusers. And the same can be said about other social psychology research areas in which the BPL is used, such as prejudice (cf. Arkin, 1981). For example, Karlines, Coffman, and Walters (1969) found that negative attitudes toward African Americans were fading as compared to similar earlier research using samples of college students. Thus, the conclusion of Karlines et al.'s study was that prejudice toward African Americans was subsiding. However, Sigall and Page (1971) used the BPL to replicate Karlines et al.'s study and found that the "fading" of negative stereotypes toward African Americans (e.g., "lazy") was evident in a self-report condition, but not in a self-report and BPL condition. College students in a BPL condition rated negative traits such as "lazy" as more characteristic for "Negroes" than for "Americans" and positive traits such as "honest" as more characteristic for "Americans" than for "Negroes." Thus, the use of the BPL uncovered that negative stereotypes toward African Americans were not fading.

A: You seem to say that detecting people smoking is equivalent to having them opt for treatment, or that uncovering a negative stereotype is equivalent to reducing prejudice. That is like saying it is acceptable for me to knock you over the head and put earmuffs on you, because then when you wake up you will continue to wear them and your ears will stay warm, and you will not catch as many colds and the country will save money on health care treatment! One option is simply to inform people of smoking treatment options. This may increase the number of people coming for treatment without the need for deception.

B: We cannot force people into treatment, but detecting smokers may make it more likely that they will volunteer for treatment.

A: This is another empirical question. Picture a psychologist saying to a person, "I tricked you into admitting that you smoke, now I would like to offer you treatment."

B: Although we do not know if detection will increase treatment, we *do* have information regarding the benefits of using the BPL to detect smoking behavior. A recent meta-analysis by Aguinis et al. (1993) yielded an average effect size of .13. This effect size represents the standardized difference between the proportion of self-reported smokers in

BPL and no-BPL groups. Admittedly, this is a much smaller effect size than the one found for social psychological research in general (cf. Roese & Jamieson, 1993). However, for some conditions (e.g., more credible BPL), the effect is larger. For other conditions (e.g., less credible BPL), the effect is even smaller. Thus, we would not use the BPL in conditions when it has been shown not to be effective, and we would use it when its benefit has been demonstrated (e.g., effect size of .10 or larger). I am not supporting the idea of using the BPL in all circumstances. For instance, I agree with Aguinis et al. (1995), who in the closing paragraph of their article discussed a few promising methods that do not involve deception to be used in situations when the BPL is ineffective. I am saying we need valid information. Let's use the best possible means of getting valid information. In judging what is best from a utilitarian perspective, the damages of using the BPL are unknown, and the benefits of using the BPL are, for some research areas, clear across a large number of studies.

A: Can we agree that the BPL should not be used when there are no demonstrated benefits?

B: Yes. Using the BPL to detect alcohol drinking and marijuana smoking does not seem to be effective (Aguinis et al., 1995). Past research has found that engaging in these behaviors may not be seen as socially undesirable. Thus, there is no reason why the BPL should yield more valid self-reports than regular paper-and-pencil questionnaires. Again, there is empirical evidence indicating that in some areas there are no benefits to using the BPL. In this case, then, I agree that we should not utilize this method. Regular self-reports are as valid as self-reports with a BPL procedure.

A: Given what we know about using the BPL in detecting smoking behavior, and given that we can predict with some degree of accuracy what the difference will be between using self-reports alone and self-reports accompanied by the BPL, why not use self-reports without the BPL, and add or multiply the obtained results by a constant? In this manner, we would avoid the ethical disadvantages.

B: This is a very interesting idea. However, we could use this adjustment for aggregate data only. That is, we could, for example, measure self-reported prejudice, and then use an adjustment factor to compute the actual number of respondents who would have been classified as

“prejudiced” using the BPL. However, this procedure would not allow for the correction of individual scores. So this is a good solution in part. We could utilize it in the area of smoking, for example, because we are interested in whether there are many smokers in a specific group (e.g., a high school). Following your suggestion, we could use self-report measures alone, do the appropriate adjustment, and then decide whether the number of smokers is large enough to warrant an intervention program.

On the other hand, unfortunately, we cannot use this adjustment for other social psychological research because researchers want to correlate individual scores on some socially undesirable behavior/attitude with other variables, and individually “corrected” scores will not be available.

A: Ah, back to basic research. Your statements in favor of the BPL assume that getting undistorted data about particular sets of behaviors and attitudes is quite important. I believe the value of pure information, relative to the costs, may be even less than the value of making sure we offer (ineffective) treatment to smokers (who may refuse). Let me offer a “slippery slope” argument. If the use of the BPL and deception in general continues, we will not be able to find the causes and correlates of anything, because people will always be suspicious of social and other applied psychologists and therefore will not provide good data (Orne, 1962).

B: Another question that needs to be tested specifically regarding the use of the BPL.

A: Since you believe that conducting more studies seems to be the solution for everything, let’s do a study comparing “bogus information” with “real information.” Given that we have ways to get some of this information using “real lie detectors,” such as biochemical measures (e.g., number of carbon monoxide particles in saliva), we can compare using self-reports with the BPL versus biochemical indicators. The tests are not perfect, but they may be better than using self-reports accompanied by deception.

B: Actually, a review of methods to detect smoking behavior (Pechacek, Fox, Murray, & Luepker, 1984) described several as yet imperfect biological markers available, such as carbon monoxide and

thiocyanate. However, from a utilitarian perspective, there are two arguments against using biochemical indicators. First, the BPL is less expensive to administer than biochemical markers. For example, biochemical markers such as carbon monoxide can be assessed by collecting expired-air samples from each individual, and thiocyanate can be measured by collecting saliva samples. These procedures require specialized equipment. Second, and more important, you may use these indicators (imperfectly) to measure drug use, but there are no such things as biochemical markers to measure attitudes and prejudice. If these biological markers existed, years of social psychological research on the measurement of attitudes could have been spared!

Deontological Perspective

A: We have talked a lot about the benefits and risks of the procedure. But from a deontological perspective, these consequences are not the defining variables upon which we justify or condemn an activity. We need to look at our duty to other people, including research participants, and I would argue that, according to the principles of fidelity (promise keeping) and veracity (honesty), routinely lying is wrong, regardless of the good that may be achieved. A relative increase in the validity of our data does not justify violating the rights of research subjects.

B: I agree that participants' rights should not be violated. However, and also from a deontological perspective, I argue that we have a moral obligation to use methods that will yield the most valid information (e.g., BPL over self-reports). As psychologists, we have a moral obligation to report valid information, as indicated in the American Psychological Association's (APA, 1992) ethical standards.

A: Yes, but not at the expense of the dignity of the participants (APA, 1992, Standard 6.07a). And even if we did not have to lie to people, we are violating their rights to privacy by tricking them into revealing personal and often self-incriminating information that they clearly did not want to reveal. Are you really saying that we (social psychologists, psychology in general, health care professionals, society) have an unqualified right to know what people do in the privacy of their own homes, or on loading docks where they work?

B: This is a good point. However, what value is more relevant: (a) privacy, or (b) helping them to stop using substances associated with heart

disease, emphysema, cancers, and learning about the causes of prejudice, for example? The principle of beneficence (doing good, preventing harm) is relevant to this deontological perspective.

A: The answer is that *privacy* is more relevant. Your focus on helping people (beneficence) even when they are choosing not to disclose information and choosing not to be helped (autonomy) is a classic example of paternalism (Beauchamp & Childress, 1994). The principle of autonomy states that people can govern themselves, and that they have a right to choose behaviors that we consider foolish. We have a duty to respect the choices that people make. The BPL is especially pernicious because it prevents people from making free informed choices.

B: But we also have the duty as scientists to help humankind and to use our knowledge for the benefit of society. This is exactly what we do when we use the BPL.

A: It may be disingenuous to say that we are doing this research purely for the benefit of the public. Of the primary-level studies included in the most recent meta-analyses, especially the smoking and alcohol consumption studies, for example, how many researchers used their results in any practical way? Also, and most important from the deontological perspective, lying is wrong, and violating people's privacy is wrong. It is not compensated for by doing, or trying to do, good for people. Yes, we have a duty to help people, but this duty of beneficence is an "imperfect obligation"; we do not have a specific duty to help all people who could possibly benefit from our efforts.

B: Regarding your first point, there is a difference between using the BPL and actually conducting an intervention. Using the BPL provides more valid information. Then, this information can be used in several beneficial ways or not be used at all. Should we condemn the BPL because the results are not used? The studies reviewed in the Aguinis et al. (1993) meta-analysis, for example, were not designed to plan interventions. They addressed the validity of self-reports and attempted to enhance their validity. These basic research studies were providing the essential substrate for applied work. Thus, planning an intervention was beyond the scope of these papers.

A: The answer to your question is "Yes, we should condemn the BPL because information obtained was not used," especially if your only

justification for using the BPL is the utilization of the information obtained. You cannot have it both ways. You cannot justify lying by saying that the information will be put to good use. You certainly cannot justify the BPL by saying that the information will be put to good use by somebody else. Also, there is no *a priori* reason to lie to people. It is only a means to an end. Therefore, it needs to be specifically justified by overriding reasons, and I do not believe there are any.

B: We do not need to lie to them *a priori*. However, if we do not, they do not report true levels of smoking, and true attitudes and behaviors. Thus, the BPL avoids getting distorted data!

A: What are we telling (modeling for) students of psychology by telling them that we have to lie to people to get them to tell the truth? The deception involved in BPL studies is wrong, even if there are direct positive benefits. It is wrong because it violates our duties of veracity and fidelity. Also, it would seem that we are developing a science of what people do under deception.

B: We are not developing a science of what people do under deception. We are trying to obtain valid reports of a number of behaviors. The BPL seems to be an effective way to do so. The BPL is just a means to obtain more valid self-reports. If there are other ways to enhance the validity of self-reported socially undesirable behaviors, and this other method does not include deception, then GREAT! Social psychologists have struggled with this issue for decades (Kelman, 1967). We have an obligation to report accurate findings. If we use invalid measurement instruments, we are violating this obligation as research scientists.

A: The reasoning of researchers using the BPL seems to be, "We have this paradigm, let's see how we can use it," rather than, "We have a question to answer, let's see the most direct and respectful way we can answer it."

B: The BPL is not being used in just any social psychological area for just any purpose (cf. Roese & Jamieson, 1993). An examination of the articles included in recent meta-analyses indicates that the BPL is used only in domains believed to be affected by social desirability bias, such as prejudice (e.g., Sigall & Page, 1971) and attitude change (e.g., Gaes et al., 1978).

A: The fact that smoking has detrimental health-related consequences does not mean that we can use deceptive treatments to detect it. Smoking is legal, and lying is ethically wrong.

B: Yes. Smoking is legal. However, using the BPL is also legal.

A: "Legal" doesn't mean "ethically justifiable." Our professional ethical standards are broader than the law.

You stated earlier that you would not condone using the BPL if there were other ways to get the same information and when the BPL has been shown to be ineffective.

B: Yes, unless the other methods are too expensive (e.g., the use of biological markers) or involve some other costs that outweigh the benefits.

A: What about minors? Children cannot give valid consent; how do you justify using the BPL with children?

B: I would obtain consent from parents or guardians, just like with any other research on children. I would also make it clear that information about any particular child will not be shared with parents.

A: Your concern for confidentiality is admirable. However, I would argue that the deception and invasion of privacy involved in BPL research—even more than in other deceptive paradigms—makes the use of proxy consent less justifiable.

Summary and Conclusion

B: I think we can summarize our basic positions now. I believe that the BPL can and should be used unless there are clear, empirically based risks that outweigh the benefits of the procedure.

A: And I believe that we should start with the assumption that the BPL procedure is inherently problematic because of ethical principles including veracity, fidelity, privacy, and respect for autonomy. The BPL poses ethical issues that go beyond more typical studies using deception. In BPL studies, (a) experimenters actively lie to participants, (b) the information gathered is personal and often self-incriminating, (c) participants may be forced to recognize truths about themselves (e.g., prejudice) that

may be harmful for their psychological stability, (d) samples usually include children, and (e) participants effectively lose the ability to withdraw voluntarily from the experiment (e.g., by providing false information). Because of the uniqueness of the ethical issues raised by the use of the BPL, this procedure should not be used unless it can be shown that there are considerations that make it *imperative* to do so.

B: My arguments rest on some empirical assumptions, and I think we have agreed that research is necessary to address several questions, including (a) Does using the BPL cause damage to the profession?; (b) Can the harmful effects of the BPL be mitigated by debriefing?; and (c) Will detecting smokers and offering them treatment increase the likelihood that they will accept treatment, or that they would benefit from it? Some of these questions have been posed regarding deception in general (e.g., Christensen, 1988; Greenberg & Folger, 1988), but not regarding the BPL.

A: I would add to that list Has the BPL led to any theoretical advances that might outweigh even minimal risks? And what programs have been developed, or how many people have stopped smoking, as a result of using the BPL?

B: So we agree that more research is necessary.

A: Yes, but beware. More empirical data will not magically solve our disagreements. There are fundamental value questions that underlie our positions. So, even if we obtain information that the BPL has minimal costs associated with it, I would still say that the value I place on autonomy and privacy is greater than the value of new theory. And you would disagree.

B: Yes, I might be more willing to infringe on the rights of participants because I place more value on knowledge.

A: We must agree to disagree, then. All I would ask is that as we do the research that is necessary, we must not forget to be honest with ourselves about the values and obligations we have.

B: Indeed. Continuing debate from both utilitarian and deontological perspectives will create a better outcome, and therefore is necessary from a utilitarian perspective! These questions are not easily resolved, but I am glad we have begun the discussion.

References

- Aguinis, H. (1993). Action research and scientific method: Presumed discrepancies and actual similarities. *Journal of Applied Behavioral Science*, **29**, 416-431.
- Aguinis, H., Pierce, C. A., & Quigley, B. M. (1993). Conditions under which a bogus pipeline procedure enhances the validity of self-reported cigarette smoking: A meta-analytic review. *Journal of Applied Social Psychology*, **23**, 352-373.
- Aguinis, H., Pierce, C. A., & Quigley, B. M. (1995). Enhancing the validity of self-reported alcohol and marijuana consumption using a bogus pipeline procedure: A meta-analytic review. *Basic and Applied Social Psychology*, **16**, 515-527.
- American Psychological Association. (1992). Ethical principles of psychologists and code of conduct. *American Psychologist*, **47**, 1597-1611.
- Arkin, R. M. (1981). Self-presentational styles. In J. T. Tedeschi (Ed.), *Impression management theory and social psychological research* (pp. 311-333). San Diego, CA: Academic.
- Baumrind, D. (1964). Some thoughts on ethics of research: After reading Milgram's "Behavioral study of obedience." *American Psychologist*, **19**, 421-423.
- Baumrind, D. (1971). Principles of ethical conduct in the treatment of subjects: Reaction to the draft report of the Committee on Ethical Standards in Psychological Research. *American Psychologist*, **26**, 887-896.
- Baumrind, D. (1985). Research using intentional deception: Ethical issues revisited. *American Psychologist*, **40**, 165-174.
- Beauchamp, T. L., & Childress, J. F. (1994). *Principles of biomedical ethics* (4th ed.). New York, NY: Oxford University Press.
- Chisholm, R. F., & Elden, M. (1993). Features of emerging action research. *Human Relations*, **46**, 275-298.
- Christensen, L. (1988). Deception in social psychological research: When is its use justified? *Personality and Social Psychology Bulletin*, **14**, 664-675.
- Dresser, R. S. (1981). Deception research and the HHS final regulations. *IRB: A Review of Human Subjects Research*, **3**(4), 3-4.
- Fillenbaum, S. (1966). Prior deception and subsequent experimental performance: The "faithful" subject. *Journal of Personality and Social Psychology*, **4**, 532-537.
- Gaes, G. G., Kalle, R. J., & Tedeschi, J. T. (1978). Impression management in the forced compliance situation: Two studies using the bogus pipeline. *Journal of Experimental Social Psychology*, **14**, 493-510.

- Gerdes, E. P. (1979). College students' reactions to social psychological experiments involving deception. *Journal of Social Psychology*, **107**, 99-110.
- Goldstein, R. (1981). On deceptive rejoinders about deceptive research: A reply to Baron. *IRB: A Review of Human Subjects Research*, **3**(8), 5-6.
- Greenberg, J., & Folger, R. (1988). *Controversial issues in social research methods*. New York, NY: Springer-Verlag.
- Holmes, D. S. (1976a). Debriefing after psychological experiments: I. Effectiveness of post-deception dehoaxing. *American Psychologist*, **31**, 858-867.
- Holmes, D. S. (1976b). Debriefing after psychological experiments: II. Effectiveness of post-experimental desensitization. *American Psychologist*, **31**, 868-875.
- Howard, G. S., Millham, J., Slaten, S., & O'Donnell, L. (1981). Influence of subject response style effects on retrospective measures. *Applied Psychological Measurement*, **5**, 89-100.
- Jones, E. E., & Sigall, H. (1971). The bogus pipeline: A new paradigm for measuring affect and attitude. *Psychological Bulletin*, **76**, 349-364.
- Karlins, M., Coffman, T. L., & Walters, G. (1969). On the fading of social stereotypes: Studies in three generations of college students. *Journal of Personality and Social Psychology*, **13**, 1-16.
- Kelman, H. C. (1967). Human use of human subjects: The problem of deception in social psychological experiments. *Psychological Bulletin*, **67**, 1-11.
- Lord, F. M. (1953). On the statistical treatment of football numbers. *American Psychologist*, **8**, 750-751.
- Milgram, S. (1964). Issues in the study of obedience: A reply to Baumrind. *American Psychologist*, **67**, 371-378.
- Murray, D. M., & Perry, C. L. (1987). The measurement of substance use among adolescents: When is the "bogus pipeline" method needed? *Addictive Behaviors*, **12**, 225-233.
- Orne, M. T. (1962). On the social psychology of the psychological experiment: With particular reference to demand characteristics and their implications. *American Psychologist*, **17**, 776-783.
- Ostrom, T. M. (1973). The bogus pipeline: A new *ignis fatuus*? *Psychological Bulletin*, **79**, 252-259.
- Page, R. A., & Moss, M. K. (1975). Attitude similarity and attraction: The effects of the bogus pipeline. *Bulletin of the Psychonomic Society*, **5**, 63-65.
- Pechacek, T. F., Fox, B. H., Murray, D. M., & Luepker, R. V. (1984). Review of techniques for measurement of smoking behavior. In J. D. Matarazzo, S. M. Weiss, J. A. Herd, N. E. Miller, & S. M. Weiss (Eds.), *Behavioral*

- health: A handbook of health enhancement and disease prevention* (pp. 729-754). New York, NY: John Wiley and Sons.
- Plato. (1992). *Republic* (G. M. A. Grube, Trans., revised by C. D. C. Reeve; 2nd ed.). Indianapolis, IN: Hackett. (Original work published ca. 380 B.C.)
- Ring, K., Wallston, K., & Corey, M. (1970). Mode of debriefing as a factor affecting subjective reaction to a Milgram-type obedience experiment: An ethical inquiry. *Representative Research in Social Psychology*, **1**, 67-88.
- Roese, N. J., & Jamieson, D. W. (1993). Twenty years of bogus pipeline research: A critical review and meta-analysis. *Psychological Bulletin*, **114**, 363-375.
- Schlenker, B. R., Bonoma, T. V., Hutchinson, D., & Burns, L. (1976). The bogus pipeline and stereotypes toward Blacks. *Journal of Psychology*, **93**, 319-329.
- Sharpe, D., Adair, J. G., & Roese, N. J. (1992). Twenty years of deception research: A decline in subjects' trust? *Personality and Social Psychology Bulletin*, **18**, 585-590.
- Sieber, J. E. (1982). Deception in social research: I. Kinds of deception and the wrongs they may involve. *IRB: A Review of Human Subjects Research*, **4**(9), 1-5.
- Sigall, H., & Page, R. A. (1971). Current stereotypes: A little fading, a little faking. *Journal of Personality and Social Psychology*, **18**, 247-255.
- Silverman, I., Shulman, A. D., & Wiesensthal, D. L. (1970). Effects of deceiving and debriefing psychological subjects on performance in later experiments. *Journal of Personality and Social Psychology*, **14**, 203-212.
- Smith, S. S., & Richardson, D. (1983). Amelioration of deception and harm in psychological research: The important role of debriefing. *Journal of Personality and Social Psychology*, **44**, 1075-1082.
- Viswesvaran, C., & Schmidt, F. L. (1992). A meta-analytic comparison of the effectiveness of smoking cessation methods. *Journal of Applied Psychology*, **77**, 554-561.