Guidelines for Ethical Conduct of Behavioral Projects
Involving Human Participants by High School Students

Improving science literacy in the United States requires strengthening science, technology, engineering, and mathematics (STEM) education at the middle- and high-school levels. Including a hands-on research experience element in the curricula of scientific disciplines is a crucial part of education in all STEM disciplines, including psychology. Research activities enable students to understand the principles and methods of scientific research in psychology. While engagement in research-based activities at the high school level may be purely educational in nature (that is, they do not generate new knowledge), such activities serve to improve science literacy. In addition to enriching the educational experience, engaging in research also enhances critical thinking, creativity, and original thought. Engaging in research also increases knowledge about the scientific process and introduces students to research career options. Furthermore, it provides an opportunity for students to gain first-hand experience about the ethics underlying research with human participants.

Prior to beginning research projects, it is important that teachers who serve as research supervisors and high school students be knowledgeable about and respectful of the ethical principles underlying research with human participants. Experimentation and research with human participants have and continue to make tremendous contributions to improving peoples' lives. However, there have also been several reports of unethical research practices and abuses of human participants in research. It was in response to reports of such abuses in the early 1970s that the United States government established the National Commission for the Protection of Human Subjects in Biomedical and Behavioral Research. In 1978, the Commission published the Belmont Report which outlined three ethical principles that are meant to guide research conducted with humans.

A. Respect for persons – individuals should be treated as independent agents, and individuals with diminished independence are entitled to special protections.

B. Beneficence – individuals should not be exposed to harm or unnecessary risk, and any benefits should be maximized.

C. Justice – individuals should be exposed to fair and equitable procedures, and fair distribution of costs and benefits.

Each of these principles when translated within the research setting places certain obligations on the researcher. The principle of respect for persons requires voluntary informed consent be obtained from potential participants. The principle of beneficence requires the maximization of

potential benefits and minimization of potential harms associated with participating in research. And finally, the principle of justice focuses on the selection of research participants ensuring that some classes of people (e.g., persons on welfare, persons belonging to particular racial and ethnic minority groups, or persons confined to institutions) are not being systematically selected simply because of their easy availability, their compromised position, or their manipulability, rather than for reasons directly related to the problem being studied.

High school students who wish to conduct research with human participants should also be aware of the U.S. government regulations that pertain to the protection of human research participants. Typically, individuals conducting research with human participants at colleges and universities are required to comply with the Department of Health and Human Services, Office of Human Research Protection (OHRP) Code of Federal Regulations Title 45, part 46 (45 CFR 46). These regulations were developed to ensure that the rights and welfare of human research participants are safeguarded. High school students who are conducting research projects that are intended for science fair exhibition or publication often have to comply with the requirements of the science fair sponsor or publishing journal, which rely on the U.S. government standards and regulations. In addition, high school students and their teachers need to be cognizant of their own school district policies and procedures with regard to research being conducted by high school students, and involving other students as participants.

Because psychological research with human participants is essential to understanding human behavior and cognition, the American Psychological Association (APA) has established the Committee on Human Research (CHR), a committee whose mission includes developing policies that help protect the rights and welfare of human research participants. To that end, CHR has developed guidelines, described below, for high school students conducting research with human participants. These guidelines were developed in accordance with the rules and regulations mandated by the federal government, as well as the APA Code of Ethics, specifically pertaining to Standard 8, which pertains to research and publication.

It is important to recognize that this document constitutes guidelines, which are meant to provide support or recommendations, but cannot mandate specific approaches or actions. Unlike guidelines, standards may be considered mandatory and may therefore be accompanied by an enforcement mechanism. This document is intended to be aspirational in intent, and to facilitate and assist research projects conducted by high schools students. These guidelines are not intended to be mandatory, exhaustive, or definitive, and may not be applicable in every situation.

CHR recommends that students and teachers consider the following guidelines when conducting research with human participants:

1. Prior to beginning a research project, students and teachers inform themselves of the ethical underpinnings of research with human participants and relevant U.S. government regulations for the protection of the rights and welfare of human research participants.

2. Prior to beginning a research project, students become familiar with the relevant research literature. This includes previous and current research articles pertaining to the student's research topic. Preferably, the student finds, reviews, and summarizes the pertinent scientific literature.

3. Prior to beginning a research project, students find a qualified supervisor, who is expected to assume the primary responsibility for all aspects of the research project. Specifically, the supervisor is:
   a. Responsible for the conduct of the student researcher.
   b. Expected to be familiar with the relevant research literature regarding the student's chosen area. If a well-qualified supervisor cannot be found, students may seek outside assistance with a designated supervisor.

4. Students must submit a written proposal containing the following elements:

   a. General and specific statements of purpose of the research project

   b. The research design and analysis plan

   c. Clear procedures and justification of the chosen method

   d. The population being studied

   e. The process of obtaining informed consent from prospective participants, and in the case of minors, permission from their parents or legal guardians and assent from the prospective minor participant as required by federal regulations governing human research, including the following elements:
      i. Explanation of the purpose of the research, the time commitment expected of the participants, and a description of the procedures in a way that all potential research participants and parents/guardians can understand.
      ii. Description of any expected benefits from participation.
      iii. Description of any foreseeable risks of harm or discomforts from participation. In cases where the research participants are students themselves, they should not be exposed to any risk greater than the ordinary risks of daily life in school. Although students should not be conducting research that poses foreseeable risks of

physical, psychological, or social harm to participants, procedures should be included to indicate what will be done to detect and remediate harmful effects.

iv. Clear indication that participation is voluntary, that the research participant can discontinue participation at any time, and that refusal to participate will involve no penalty. Opportunities to withdraw with minimum discomfort and stigma, especially with group activities should be provided. Under NO CIRCUMSTANCES are potential participants to be exposed to ridicule, force, or excessive group pressure. Furthermore, students should not be publicly identified if they choose or decline to participate.

v. Describe how confidentiality will be maintained. The confidentiality of the information collected should be preserved and maintained. This includes casual conversations, social media outlets, and publication. In most research, the aim is to learn a principle of human behavior, not specific information about any particular person. For this reason, data should be collected anonymously to protect the privacy of those who participate in the research. The research participant must be informed if it may be difficult or impossible to maintain full confidentiality about the information collected and be given the choice to not participate. Only with the participant's full agreement may the student researcher disclose identifiable information about the research participant.

vi. List a name and contact information of a person who can be contacted for answers to questions about the research project, research participants' rights, and/or report a research-related injury.

vii. Once the procedures are completed, misperceptions about the research intent or procedures should be corrected through a debriefing session, especially in projects that used deception, if appropriate.

viii. Describe how data will be analyzed and stored.

5. High school administrators and teachers are highly encouraged to form student/teacher/administrator committees to examine all research proposals and review their merit and procedures, including the benefits and risks and the informed consent forms and process. This committee will act in a similar manner to Institutional Review Boards (IRBs), which are convened at colleges and universities to provide oversight of research with human participants and to ensure that such research is in compliance with relevant federal regulations and institutional policies for the protection of human research participants.

6. To ensure that confidentiality is maintained, data collected during the research project must be safeguarded by the teacher or appropriately destroyed.

7. Students, teachers, and research supervisors are encouraged to consult with the Committee on Human Research at the American Psychological Association. The Committee on Human Research can interpret and provide advice on adherence to these guidelines. In cases where school facilities cannot support advanced research by qualified students, the Committee on Human Research will try to make suitable arrangements for the students. The Committee on Human Research can be contacted through the APA Science Directorate at 750 First Street NE, Washington, DC 20002 or science@apa.org.

8. Schools are strongly encouraged to post a copy of these guidelines in a location where students can easily access them.

References:

Department of Health and Human Services. (2009). Code of Federal Regulations (CFR), Title 45 (Public Welfare) Part 46(Protection of Human Subjects). Retrieved November 8, 2011 from http://www.hhs.gov/ohrp/policy/ohrpregulations.pdf

The National Commission for the Protection of Human Subjects in Biomedical and Behavioral Research. (1978). The Belmont Report: Ethical principles and guidelines for the protection of human subjects of research. Retrieved November 8, 2011 from http://videocast.nih.gov/pdf/ohrp_belmont_report.pdf