



## View xForm - Human Subjects Review Protocol

Please use this Human Subjects Review Protocol form when submitting to the IUP IRB.

New protocol data entry

- Submitted 2/22/2018 10:09:45 AM ET by [REDACTED]

### Project Information

#### Saving Instructions

**Each time you click 'Next' or 'Previous' your work is saved. You may click 'Save for Later' to save where you are and leave the form. Finally, if you jump to another page, using the dropdown at the top of the form, your work on each page will be saved. You will not be able to 'Check and Submit' form until all required fields are entered.**

#### Submitter

[REDACTED]

Email: [REDACTED]@iup.edu

#### Project Title

Scientific Literacy and Fingerprints II

#### Project Type

Faculty Research

*\*ALL STUDENT PROJECTS MUST BE ACCOMPANIED BY A HUMAN SUBJECTS CITI TRAINING COMPLETION REPORT. PROTOCOLS FROM STUDENTS WILL NOT BE APPROVED UNTIL THIS ITEM IS RECEIVED*

#### Please enter the email address of the Principal Investigator.

[REDACTED]

Email: [REDACTED]@iup.edu

You must enter your official university email address (for example: jdoe@iup.edu or wxyz@iup.edu) Do NOT enter an alias email address (for example Jane.Doe@iup.edu)

#### Department

Psychology

**Please add contact and then enter the email address for each Co-Investigator**

No answer provided.

You must enter the co-investigator's official university email address (for example: jdoe@iup.edu or wxyz@iup.edu). Do NOT enter an alias email address (for example Jane.Doe@iup.edu) **If the Co-investigator is not found and is a member of the IUP community**, please ask them to login into IRBManager at least once and that will allow you to complete this section. Otherwise click here to add non-IUP individuals to the system.

**Please click add contact and then enter the email address for each student research assistant**

██████████  
Email: ██████@iup.edu

██████████  
Email: ██████@iup.edu

**If the student research assistant is not found and is a member of the IUP community**, please ask them to login into IRBManager at least once and that will allow you to complete this section. Otherwise click here to add non-IUP individuals to the system.

**Will students be added at a later date.**

No

**Estimated project start date**

3/1/2018

The project cannot start before IRB approval

**Estimated project end date**

2/28/2019

This date cannot be longer than a year from the start date. If you plan your project to go beyond one year you will need to submit a request for continuing review at the appropriate time.

**Funding Information**

**Project Funding Source**

Non-funded research

Please check all that apply

**Combined Funding Source**

Non-funded research

**Project Description**

### **Purpose of the study**

This study examines the impact of evidentiary shortcuts such as visual representations of fingerprint evidence and an expert's declaration of a match on jurors' decision making, and whether scientific literacy moderates the use of these shortcuts.

*In a few sentences, describe the purpose of the study. This section need not be elaborate, but does need to clearly indicate the purpose of the study in a way that is clear to persons not familiar with the project.*

### **Background of the study**

Much of the evidence presented at trial is complex, particularly scientific evidence such as DNA and fingerprint evidence. There are concerns about lay people's (i.e., jurors') ability to adequately evaluate this type of evidence (Scurich & John, 2013). Research looking at how well jurors understand scientific evidence suggests that jurors can find some aspects of forensic evidence, like error rates, confusing. Other research however, suggests that jurors can appropriately evaluate some aspects of forensic evidence. In looking at fingerprints specifically, Reardon, Danielsen and Meissner (under review) found that jurors were sensitive to some aspects of this scientific evidence, such as the quality of the latent print, and the number of points of similarity between a latent print and defendant print. Jurors were insensitive to other aspects of the fingerprint evidence, including laboratory error rates.

The current study represents another attempt to examine how jurors evaluate fingerprint evidence. In this study we are specifically interested in whether jurors take evidentiary "shortcuts" when available instead of fully processing the complex evidence provided by the expert witness. For example, will jurors simply rely on an expert's declaration of a match instead of evaluating the quantitative aspects of the evidence? Similarly, will jurors be unduly influenced by visual aids of the fingerprint comparison? Research on information processing suggests that people are likely to take mental shortcuts, or to use peripheral processing, depending on various factors, such as the number of arguments someone makes, reactions of other people, or attractiveness or likeability of a person. We are further interested in whether a jurors' scientific literacy influences whether they rely on evidentiary shortcuts when available.

*This section should provide the reader with the administrative and/or scholarly context from which the project emerges. The section should contain enough information to provide Board members with no expertise in your discipline an understanding of how/why the use of human participants is warranted. This can often (but not always) be accomplished in one single spaced typed page or less. It is important to provide relevant citations and complete references so that the Board can conduct any necessary review of these foundations.*

**What method(s) or design feature(s) do you plan to use in this study? Please choose all that apply**

Control Group  
Experimental Group  
Questionnaire

*This information is used only for internal record keeping and quick identification. Simply mark those methods/design features you currently plan to use.*

**Subject Population**

**Age Range**

Participants will be 18 years old or older.  
Minors will be excluded.

*State the anticipated age range. If it is your intention to exclude minors (those 17 and under), please say so explicitly.*

**Gender**

All

**Inclusion Criteria**

Participants will be members of the Psychology Subject Pool who are 18 years old or older.

**Exclusion Criteria**

Participants under the age of 18 will be excluded.

**Protected population and sensitive subjects: Indicate if any Human Subjects from the following list will be involved in the proposed activity:**

*No answer provided.*

**Vulnerable Subjects**

Vulnerable participants will not be recruited.

*If it is your intention to use vulnerable subjects, justify the importance of their use. Here and throughout the protocol discuss how their vulnerability will be matched with appropriate safeguards. The IRB web page discusses vulnerable subjects in more detail.]*

**Methods and Procedures**

**Methods and Procedures**

*This is arguably the most important section of the protocol. You should complete this section in such a way that all of the research procedures are clear. Do not assume that any parts of the procedure can be inferred, and compose this section as though you were writing instructions that someone else could follow to conduct the project.*

### Method of Subject Selection

Participants enrolled in the Psychology Subject Pool will have the option of signing up for the study.

*Provide complete information about how research subjects will be identified, recruited, invited to participate, etc. Indicate approximately how many research subjects you will contact and how many you will actually use in your research. Your description of recruitment and selection must include any letters, announcements, advertisements, or other related materials. Any materials used in any selection/recruitment context should be included in the "Attachments" section below. Please see the IRB website for more information regarding how to protect the privacy, dignity, and welfare of potential subjects.*

### Study Site

The study will be implemented in a classroom in Uhler Hall.

*Indicate where the study will be conducted. For sites other than IUP (and sometimes for various offices on the IUP campus), investigators must provide a site approval letter from the outside site. The site approval letter needs to come on the site's own letterhead (i.e., not a plain piece of paper or IUP letterhead for outside sites), contain language that indicates the site understands the nature of the research in question and what their involvement will entail, and be signed by a person from the site with the authority to provide such approval. If the site approval letter is included with the protocol, note this fact in this section, indicate it as one of the "Attachments" (later in this document), and append it to the protocol. If the site approval will arrive under separate cover, state that here.*

## Methods and Procedures Applied to Human Subjects

Participants will be given an informed consent document that does not require a signature, in order to protect anonymity of the participant. By remaining in the room participants will indicate consent. Participants will then be given one of 16 versions of a crime and trial summary about a fictional home robbery. The trial stimulus was created by experimenters. The primary piece of incriminating evidence in this case is a fingerprint found at the scene of the crime. A fingerprint expert testifies about the latent print and how it compares to the defendant's print. This expert testimony contains the four manipulations regarding the fingerprint evidence, resulting in a 2 (Fingerprint Visual vs No Visual) x 2 (Quality of Print: clear vs. smudged) x 2 (Points of Similarity: 5 vs. 15) x 2 (Match Declared vs. Not Declared) between subjects design. After reading the case facts at their own pace, participants will complete a questionnaire to measure case perceptions, scientific literacy, and demographics. Participants will then be debriefed through a debriefing form, and released.

*Describe exactly will happen with the subjects from the time of their first contact until the time of their last contact. What will participants actually do while participating in the project?*

## Risks/Benefits

### Potential Risks

This study poses minimal risk. Participants will be reading about a non-violent crime which is something participants could be exposed to in everyday life in the media or as a juror.

*Describe the level of risk of the study to the participants, investigators, and any other group that might be impacted. You should compare the level of risk in your study and the federal definition of "minimal risk". "Minimal risk" is defined in 45 CFR46.1029(i) as "the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests." Visit the IRB website for more detail on this topic.*

### Protection Against Risks

Participants are free to withdraw from the study at any time by notifying the experimenter. Any data collected up to that point will be destroyed. No identifying information will be collected on the questionnaire to ensure anonymity of the data. Participants will sign in on a separate sheet of paper to allow the experimenter to grant credit. This sign-in sheet will be stored separated from the data.

*Discuss in detail how the investigators will provide safeguards against the identified risks.*

### Potential Benefits

There are no direct benefits to participants though they may learn a little about how the criminal justice system works and how psychological research is conducted.

*Discuss any potential benefits to the human subjects in the research.*

### Compensation for Participation

Participants will be compensated with 1 credit towards the PSYC 101 research requirement.

*Discuss any and all forms of compensation for participation. This includes payment, extra credit, chances at winning a gift card, etc. Discuss also how the research subject will receive this compensation.*

### Alternatives Participation

As part of the Psychology Subject Pool, participants are able to choose from among many studies. Participants can elect to complete a different study instead or can review a psychology article to receive class credit.

### Information Withheld

No information will be withheld, beyond the manipulations and hypotheses which are masked to prevent biased responding.

*If information will be intentionally withheld from research subjects, discuss this here along with the rationale for doing so.*

### Debriefing

Participants will be debriefed with a debriefing form prior to exiting the study.

*If any debriefing will be provided to the research subjects, please discuss it here.*

## Privacy/Consent/Nature of Risk

### Privacy/Confidentiality

No identifying information will be collected from participants on the questionnaire or consent document. A sign-in sheet will be used to administer course credit and this sheet will be stored separately from the data in a locked file cabinet in the principle investigator's office. The data will be stored on a password protected computer. Data will be kept for 3 years to comply with federal regulations.

*Define the level of privacy that will be afforded the research subjects (i.e., anonymity, confidentiality, or no expectation of privacy). Indicate how the level of privacy that is defined by the researcher is consistent with the study procedures and how their privacy will be protected within that framework. Federal regulations require researchers to maintain data and consent documents for three years. Please indicate you will do that and where the data will be stored.*

### The Consent Process

Participants will be given an informed consent document which requires no signature. Remaining in the room and completing the study indicates consent.

*Every process has some sort of Consent process, whether or not there is a written consent document. This section should describe the Consent Process in detail including, how Consent will be presented to the subjects, how subjects will indicate their Consent. Any relevant documents should be attached in the "Attachments" section of this form. Hard copy consent forms must be printed or copied onto IUP letterhead. If the consent document is provided electronically (e.g., Qualtrics survey), it must be sent from a valid IUP email address. NOTE: The IRB website discusses Informed Consent in detail.*

### Nature of Risk

No

*In your judgment, does your research involve more than minimal risk? Refer back to the definition of minimal risk provided above.*

### Exemption Qualification

#### Exemption Instructions

*In your judgment, does your research fall under one of the six exempt categories? If you believe it does, indicate the category under which you are claiming an exemption by choosing yes next to the relevant category.*

**Will the research be conducted in established or commonly accepted educational settings, involving normal educational practices, such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods?**

No

**Will the research be involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.**

No

**Will the research be involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior that is not exempt under (2) of this section, if: (i) the human subjects are elected or appointed public officials or candidates for public office; or (ii) federal statute(s) require(s) without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter.**

No



**Will the research be involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.**

No

**Are these research and/or demonstration projects being conducted by or subject to the approval of department or agency heads, and which are designed to study, evaluate, or otherwise examine: (i) Public benefit or service programs; (ii) procedures for obtaining benefits or services under those programs; (iii) possible changes in or alternatives to those programs or procedures; or (iv) possible changes in methods or levels of payment for benefits or services under those programs?**

No

**Will your research involve taste and food quality evaluation and consumer acceptance studies, (i) if wholesome foods without additives are consumed or (ii) if a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe, by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture?**

No

### **Expedited Review Qualification**

#### **Expedited Instructions**

*In your judgment, does your project fall under one of the nine (9) categories eligible for expedited review (listed below)? If you believe it does, indicate the category of which your claiming expedited review by choosing yes next to the relevant category.*

**Clinical studies of drugs and medical devices only when condition (a) or (b) is met. a. Research on drugs for which an investigational new drug application (21 CFR Part 312) is not required. (Note: Research on marketed drugs that significantly increases the risks or decreases the acceptability of the risks associated with the use of the product is not eligible for expedited review.) b. Research on medical devices for which (i) an investigational device exemption application (21 CFR Part 812) is not required; or (ii) the medical device is cleared/approved for marketing and the medical device is being used in accordance with its cleared/approved labeling.**

No

**Collection of blood samples by finger stick, heel stick, ear stick, or venipuncture as follows: a. from healthy, nonpregnant adults who weigh at least 110 pounds. For these subjects, the amounts drawn may not exceed 550 ml in an 8 week period and collection may not occur more frequently than 2 times per week; or b. from other adults and children, considering the age, weight, and health of the subjects, the collection procedure, the amount of blood to be collected, and the frequency with which it will be collected. For these subjects, the amount drawn may not exceed the lesser of 50 ml or 3 ml per kg in an 8 week period and collection may not occur more frequently than 2 times per week.**

No

**Prospective collection of biological specimens for research purposes by noninvasive means. Examples: (a) hair and nail clippings in a nondisfiguring manner; (b) deciduous teeth at time of exfoliation or if routine patient care indicates a need for extraction; (c) permanent teeth if routine patient care indicates a need for extraction; (d) excreta and external secretions (including sweat); (e) uncannulated saliva collected either in an unstimulated fashion or stimulated by chewing gumbase or wax or by applying a dilute citric solution to the tongue; (f) placenta removed at delivery; (g) amniotic fluid obtained at the time of rupture of the membrane prior to or during labor; (h) supra- and subgingival dental plaque and calculus, provided the collection procedure is not more invasive than routine prophylactic scaling of the teeth and the process is accomplished in accordance with accepted prophylactic techniques; (i) mucosal and skin cells collected by buccal scraping or swab, skin swab, or mouth washings; (j) sputum collected after saline mist nebulization**

No

**Collection of data through noninvasive procedures (not involving general anesthesia or sedation) routinely employed in clinical practice, excluding procedures involving x-rays or microwaves. Where medical devices are employed, they must be cleared/approved for marketing. (Studies intended to evaluate the safety and effectiveness of the medical device are not generally eligible for expedited review, including studies of cleared medical devices for new indications.) Examples: (a) physical sensors that are applied either to the surface of the body or at a distance and do not involve input of significant amounts of energy into the subject or an invasion of the subjects privacy; (b) weighing or testing sensory acuity; (c) magnetic resonance imaging; (d) electrocardiography, electroencephalography, thermography, detection of naturally occurring radioactivity, electroretinography, ultrasound, diagnostic infrared imaging, doppler blood flow, and echocardiography; (e) moderate exercise, muscular strength testing, body composition assessment, and flexibility testing where appropriate given the age, weight, and health of the individual.**

No

**Research involving materials (data, documents, records, or specimens) that have been collected, or will be collected solely for nonresearch purposes (such as medical treatment or diagnosis).**

No

**Collection of data from voice, video, digital, or image recordings made for research purposes.**

No

**Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.**

Yes

**Continuing review of research previously approved by the convened IRB as follows: a. where (i) the research is permanently closed to the enrollment of new subjects; (ii) all subjects have completed all research-related interventions; and (iii) the research remains active only for long-term follow-up of subjects; or b. where no subjects have been enrolled and no additional risks have been identified; or c. where the remaining research activities are limited to data analysis.**

No

**Continuing review of research, not conducted under an investigational new drug application or investigational device exemption where categories two (2) through eight (8) do not apply but the IRB has determined and documented at a convened meeting that the research involves no greater than minimal risk and no additional risks have been identified.**

No

### Attachments

#### Please attach all Informed Consent Documents if applicable

Consent Document    Consent Form

*A sample consent form can be found by clicking this link [Sample Consent Form](#)*

#### Please attach any site approval letters

*No answer provided.*

*The site approval letter **must** be on the official letterhead of the site and endorsed by the person responsible for the site.*

#### Please attach CITI Training Completion Certificates.

██████████ Certificate    CITI training certificate  
██████████ Certificate    CITI training certificate

*All students submitting a protocol are required to attach their CITI Training Completion Certificate. Student protocols will not be approved without the certificate attached.*

#### Please click 'Add Attachment' and add all relevant attachments (Questionnaire, Survey, Syllabi, Interview Guide, Focus Group Questions, Debriefing forms, Recruitment Materials)

Trial Stimulus    Survey  
Questionnaire    Survey  
Debriefing Form    Debriefing form

(To be on IUP letterhead)

## **Information Concerning Participation in a Research Study**

Title: Judgment Day

You are invited to participate in a research study. The following information is provided to help you make an informed decision whether or not to participate. Your participation is *completely voluntary*, and not participating will not affect your class grade. You must be at least 18 years old to participate in this study.

Purpose of the Study: The purpose of this study is to examine how potential jurors process information. Participation in this study will require approximately 30 minutes of your time. You will be asked to evaluate information about a fictional crime. You will also be asked to provide your demographic information.

Risks & Benefits: There are minimal risks associated with participation in this study. If you become upset or are concerned about any aspect of the study you may withdraw from the study at any time without penalty by notifying the experimenter. If you choose to withdraw from the study any data already collected from you will be destroyed. Although this study is not designed to help you personally, you may find the learning experience enjoyable. You may learn a little bit about how psychological research is conducted and about how people process information.

Privacy: Any information obtained during this study that could identify you will be kept strictly confidential. All response sheets will be anonymous and your responses will be analyzed only in combination with the responses from other participants.

Compensation: Completion of this study earns one (1) credit towards the research requirement in PSYC 101. You are free to decide not to participate in this study or to withdraw at any time by notifying the researcher. Withdrawing will not adversely affect your relationship with the investigators or IUP. You may complete a different study or summarize a psychology research article to obtain credit instead.

Questions: You may ask questions of the researcher and have those questions answered, before agreeing to participate or during the research. You may email the researcher at any time. Any information provided when contacting or communicating with the researcher will be kept strictly confidential. If you have any questions about the study or your rights as a research participant, you may contact the researcher: [REDACTED] at [REDACTED] [@iup.edu](mailto:[REDACTED]@iup.edu) .

This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Phone: 724-357-7730).

By continuing with the study, you willingly consent to participate in this research.

# COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)

## COMPLETION REPORT - PART 1 OF 2 COURSEWORK REQUIREMENTS\*

\* NOTE: Scores on this Requirements Report reflect quiz completions at the time all requirements for the course were met. See list below for details. See separate Transcript Report for more recent quiz scores, including those on optional (supplemental) course elements.

- **Name:** [REDACTED]
- **Institution Affiliation:** Indiana University of Pennsylvania (ID: 1711)
- **Institution Unit:** Psychology
  
- **Curriculum Group:** Human Subjects Research
- **Course Learner Group:** Social, Behavioral, Educational Researchers
- **Stage:** Stage 1 - Basic Course
  
- **Record ID:** 18940078
- **Completion Date:** 08-Mar-2016
- **Expiration Date:** N/A
- **Minimum Passing:** 80
- **Reported Score\*:** 89

REQUIRED AND ELECTIVE MODULES ONLY	DATE COMPLETED	SCORE
History and Ethical Principles - SBE (ID: 490)	08-Mar-2016	5/5 (100%)
Defining Research with Human Subjects - SBE (ID: 491)	08-Mar-2016	5/5 (100%)
The Federal Regulations - SBE (ID: 502)	08-Mar-2016	5/5 (100%)
Assessing Risk - SBE (ID: 503)	08-Mar-2016	5/5 (100%)
Informed Consent - SBE (ID: 504)	08-Mar-2016	4/5 (80%)
Privacy and Confidentiality - SBE (ID: 505)	08-Mar-2016	5/5 (100%)
Belmont Report and CITI Course Introduction (ID: 1127)	08-Mar-2016	3/3 (100%)
Conflicts of Interest in Research Involving Human Subjects (ID: 488)	08-Mar-2016	4/5 (80%)
Students in Research (ID: 1321)	08-Mar-2016	5/5 (100%)
Research with Prisoners - SBE (ID: 506)	08-Mar-2016	5/5 (100%)
Research with Children - SBE (ID: 507)	08-Mar-2016	1/5 (20%)

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

Verify at: [www.citiprogram.org/verify/?k96bfe229-cf0d-4172-85db-9c2b039b65a6-18940078](http://www.citiprogram.org/verify/?k96bfe229-cf0d-4172-85db-9c2b039b65a6-18940078)

### Collaborative Institutional Training Initiative (CITI Program)

Email: [support@citiprogram.org](mailto:support@citiprogram.org)

Phone: 888-529-5929

Web: <https://www.citiprogram.org>

# COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)

## COMPLETION REPORT - PART 2 OF 2 COURSEWORK TRANSCRIPT\*\*

\*\* NOTE: Scores on this Transcript Report reflect the most current quiz completions, including quizzes on optional (supplemental) elements of the course. See list below for details. See separate Requirements Report for the reported scores at the time all requirements for the course were met.

- **Name:** [REDACTED]
- **Institution Affiliation:** Indiana University of Pennsylvania (ID: 1711)
- **Institution Unit:** Psychology
  
- **Curriculum Group:** Human Subjects Research
- **Course Learner Group:** Social, Behavioral, Educational Researchers
- **Stage:** Stage 1 - Basic Course
  
- **Record ID:** 18940078
- **Report Date:** 08-Mar-2017
- **Current Score\*\*:** 89

REQUIRED, ELECTIVE, AND SUPPLEMENTAL MODULES	MOST RECENT	SCORE
Students in Research (ID: 1321)	08-Mar-2016	5/5 (100%)
History and Ethical Principles - SBE (ID: 490)	08-Mar-2016	5/5 (100%)
Defining Research with Human Subjects - SBE (ID: 491)	08-Mar-2016	5/5 (100%)
Belmont Report and CITI Course Introduction (ID: 1127)	08-Mar-2016	3/3 (100%)
The Federal Regulations - SBE (ID: 502)	08-Mar-2016	5/5 (100%)
Assessing Risk - SBE (ID: 503)	08-Mar-2016	5/5 (100%)
Informed Consent - SBE (ID: 504)	08-Mar-2016	4/5 (80%)
Privacy and Confidentiality - SBE (ID: 505)	08-Mar-2016	5/5 (100%)
Research with Prisoners - SBE (ID: 506)	08-Mar-2016	5/5 (100%)
Research with Children - SBE (ID: 507)	08-Mar-2016	1/5 (20%)
Conflicts of Interest in Research Involving Human Subjects (ID: 488)	08-Mar-2016	4/5 (80%)

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

Verify at: [www.citiprogram.org/verify/?k96bfe229-cf0d-4172-85db-9c2b039b65a6-18940078](http://www.citiprogram.org/verify/?k96bfe229-cf0d-4172-85db-9c2b039b65a6-18940078)

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# COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)

## COMPLETION REPORT - PART 1 OF 2 COURSEWORK REQUIREMENTS\*

\* NOTE: Scores on this Requirements Report reflect quiz completions at the time all requirements for the course were met. See list below for details. See separate Transcript Report for more recent quiz scores, including those on optional (supplemental) course elements.

- **Name:** [REDACTED]
- **Institution Affiliation:** Indiana University of Pennsylvania (ID: 1711)
- **Institution Unit:** Psychology
  
- **Curriculum Group:** Human Subjects Research
- **Course Learner Group:** Social, Behavioral, Educational Researchers
- **Stage:** Stage 1 - Basic Course
  
- **Record ID:** 18894342
- **Completion Date:** 03-Mar-2016
- **Expiration Date:** N/A
- **Minimum Passing:** 80
- **Reported Score\*:** 89

REQUIRED AND ELECTIVE MODULES ONLY	DATE COMPLETED	SCORE
History and Ethical Principles - SBE (ID: 490)	02-Mar-2016	5/5 (100%)
Defining Research with Human Subjects - SBE (ID: 491)	02-Mar-2016	5/5 (100%)
The Federal Regulations - SBE (ID: 502)	02-Mar-2016	5/5 (100%)
Assessing Risk - SBE (ID: 503)	03-Mar-2016	5/5 (100%)
Informed Consent - SBE (ID: 504)	03-Mar-2016	5/5 (100%)
Privacy and Confidentiality - SBE (ID: 505)	03-Mar-2016	5/5 (100%)
Belmont Report and CITI Course Introduction (ID: 1127)	03-Mar-2016	3/3 (100%)
Conflicts of Interest in Research Involving Human Subjects (ID: 488)	03-Mar-2016	4/5 (80%)
Students in Research (ID: 1321)	03-Mar-2016	4/5 (80%)
Unanticipated Problems and Reporting Requirements in Social and Behavioral Research (ID: 14928)	03-Mar-2016	5/5 (100%)
Research with Children - SBE (ID: 507)	03-Mar-2016	1/5 (20%)

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

Verify at: [www.citiprogram.org/verify/?k9e1d1478-c704-4e67-925a-a3e37d6aec34-18894342](http://www.citiprogram.org/verify/?k9e1d1478-c704-4e67-925a-a3e37d6aec34-18894342)

### Collaborative Institutional Training Initiative (CITI Program)

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# COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)

## COMPLETION REPORT - PART 2 OF 2 COURSEWORK TRANSCRIPT\*\*

\*\* NOTE: Scores on this Transcript Report reflect the most current quiz completions, including quizzes on optional (supplemental) elements of the course. See list below for details. See separate Requirements Report for the reported scores at the time all requirements for the course were met.

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- **Institution Affiliation:** Indiana University of Pennsylvania (ID: 1711)
- **Institution Unit:** Psychology
  
- **Curriculum Group:** Human Subjects Research
- **Course Learner Group:** Social, Behavioral, Educational Researchers
- **Stage:** Stage 1 - Basic Course
  
- **Record ID:** 18894342
- **Report Date:** 16-Mar-2017
- **Current Score\*\*:** 96

REQUIRED, ELECTIVE, AND SUPPLEMENTAL MODULES	MOST RECENT	SCORE
Students in Research (ID: 1321)	03-Mar-2016	4/5 (80%)
History and Ethical Principles - SBE (ID: 490)	02-Mar-2016	5/5 (100%)
Defining Research with Human Subjects - SBE (ID: 491)	02-Mar-2016	5/5 (100%)
Belmont Report and CITI Course Introduction (ID: 1127)	03-Mar-2016	3/3 (100%)
The Federal Regulations - SBE (ID: 502)	02-Mar-2016	5/5 (100%)
Assessing Risk - SBE (ID: 503)	03-Mar-2016	5/5 (100%)
Informed Consent - SBE (ID: 504)	03-Mar-2016	5/5 (100%)
Privacy and Confidentiality - SBE (ID: 505)	03-Mar-2016	5/5 (100%)
Research with Children - SBE (ID: 507)	03-Mar-2016	5/5 (100%)
Vulnerable Subjects - Research Involving Workers/Employees (ID: 483)	03-Mar-2016	Quiz Not Taken
Unanticipated Problems and Reporting Requirements in Social and Behavioral Research (ID: 14928)	03-Mar-2016	5/5 (100%)
Conflicts of Interest in Research Involving Human Subjects (ID: 488)	03-Mar-2016	4/5 (80%)

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Please read the following description over very carefully. You will be asked a series of questions about this scenario afterwards.

### **The Incident**

At about 10:45 a.m. on Monday, November 23, 2015, police received a call reporting a robbery at a domestic residence in Bellefont, Pennsylvania. Officer Mitchell and Officer Ortiz arrived at the house twenty minutes after the initial call. Officer Mitchell took statements from an older couple – John and Lisa Pentz – who stated that they had arrived home yesterday evening from a weekend vacation. They reported that it was late by the time they had returned home, so they had simply gone to bed. However, that morning they had realized that several items were missing from their home, among them: a jewelry box containing approximately \$2,200 worth of jewelry, a pistol kept in the Pentzs’ bedroom, some smaller electronics, and roughly \$300 cash that was stored in a desk drawer. The officers were also told that while nothing else appeared to be taken, it looked as though the house had been searched as objects had been misplaced and furniture shifted throughout the house.

As Officer Mitchell interviewed the couple, Officer Ortiz began examining points of entry into the house. He discovered that the door was splintered at the entrance to the house’s back porch. After searching the area further, he was able to obtain a fingerprint from the door handle, which was sent to the lab for analysis.

Additionally, Officer Ortiz talked to several of the nearby neighbors to see if anyone had seen or heard anything over the weekend. He interviewed one man who had taken his dog out around midnight on Saturday night. The man, Matthew McConnell, testified that he had seen a man leave the Pentz’ house wearing a dark-colored hoodie and a backpack while he was outside with his dog. He told the police that the man set off on foot after leaving the Pentz house and gave the police a rough description of the man.

Based on the physical description provided by the neighbor, the couple told police that it sounded like a repair man they’d had to their home a week before to fix their washing machine. The couple disclosed that they do not believe the repair man should have used the back door during his visit to repair the washing machine. They also admitted that the repair man could have overheard them discussing their upcoming trip and therefore likely knew that they would be out of town that weekend. Police called the repair company to identify the repair person. They apprehended the man, Aaron Beckett, outside of his home for questioning. After police questioned him, he was later arrested and brought up on charges of burglary.

### **The Trial**

The prosecution claims that the defendant, Aaron Becket, committed burglary at the home of John and Lisa Pentz on Saturday, November 21, 2015. The prosecution will provide evidence that McConnell fit the description of the perpetrator provided by an eyewitness, was unaccounted for during the time of the crime, and left a fingerprint at the scene of the break-in.

The defense claims that Beckett was working at his second job, a gas station on Main Street, during the time of the crime and that he had nothing to do with the burglary. Beckett's boss can testify that he was clocked in from 10:00 p.m. when Beckett's shift started, to 2:00 a.m. when he clocked out. In response to the prosecution's eyewitness, the defense will present testimony from a pawnshop owner who was sold some of the items taken from the Pentz house, who claims that the defendant is not the person who sold him the stolen items. The defense will present further evidence that Beckett was not in possession of the stolen items at the time of his arrest and that subsequent searches of his house did not produce additional evidence.

*Testimony of David Harley, witness for the defense*

I'm the manager of the Sunoco gas station down on Main Street. Aaron Beckett works nights at the gas station – he works days at that repair company. I know that Beckett punched in to work on November 21, 2015 at 10:00 p.m. – I was there, I saw him come in myself. His time card will show you that he punched out at 2:00 a.m., when his shift ended.

On cross-examination, the prosecution asks whether Beckett was ever alone in the store.

Well, I left to go home at 11:00 p.m. The store stops being busy at that time of night, and we've never needed more than one person on the register.

Prosecution: So you can't confirm that Beckett was actually in the store at midnight?

Mr. Harley: No, I suppose not.

*Testimony of Matthew McConnell, witness for the prosecution:*

I always let my dog out one last time before my wife and I head to bed. I went outside with the dog around midnight on Saturday, November 21. While we were outside, I noticed a man leaving Mr. and Mrs. Pentz's house. He was wearing a dark-colored hoodie and wearing a backpack. I thought it was odd, but I knew they were out of town, and I figured that they had just gotten someone to housesit or look after their cat while they were away. The man was tall, with dark skin and a patch of facial hair on his chin. After he left the house, he set off down the road, on foot.

The prosecutor then asks the eyewitness: Do you see the man you described in the courtroom here today?

Mr. McConnell: Yes, that's him over there [points to the defendant].

On cross-examination, the defense asks how certain he is of his identification of the suspect.

He replies that he is pretty sure he picked the right man, but admits that it was quite dark outside when he saw the perpetrator. The defense then asks how far away Mr. McConnell's own house was from the Pentz's house, and he concedes that they are across the road from each other, so they are some distance apart. He goes on to say, however, that he was walking his dog in front of the Pentz house at the time so he was fairly close to the perpetrator.

*Testimony of John Harris, witness for the defense:*

I'm the owner of Swap & Shop, one of the pawnshops in town. A couple of months ago, I received a bulletin from the local police talking about several items that were stolen recently that someone might be trying to sell. I recognized quite a few of them as items that I'd bought a few days beforehand from a guy who wanted to sell the whole batch. They weren't all distinctive pieces, but they'd all been sold in one bunch, and every item I bought from that man was on the list of stolen goods.

The defense then asks the eyewitness: Is he the man who sold you the items in question?  
[pointing to the defendant]

Mr. Harris: No, that's not him.

On cross examination the Prosecution asks how certain the pawn shop owner is of his identification.

He replies that he is fairly confident the defendant is not the man that sold him the group of items, however he does admit that his shop was busy that day so he wasn't able to spend much time with the seller, and that his memory from a month ago is a little fuzzy.

*Testimony of Fingerprint Expert:*

Every person has minute raised ridges of skin on the inside surfaces of their hands and fingers and on the bottom surfaces of their feet and toes, known as 'friction ridge skin'. Friction ridges do not run evenly and unbroken across our fingers, hands, toes and feet. Rather, they display a number of characteristics known as minutiae. Examples of minutia include ridge endings, whorls, dots, spurs, and crossovers. Fingerprints can be compared to each other by examining the minutiae to determine whether the same minutiae are present, the minutiae flow in the same direction, and the minutiae occupy the same relative positions to each other. Where minutiae on two different fingerprint impressions meet these criteria, they are referred to as points of similarity. When enough minutiae are located in the same relative position, we can declare a positive identification.

The prosecution asked the fingerprint expert to testify as to what he determined when comparing the print found by Officer Ortiz to the prints of the defendant.

The expert replies: The latent print recovered from the crime scene was a [smudged/clear], print. [Despite/Because of] the quality of the print, I was able to find [5/15] points of similarity between the latent print found at the scene of the crime and the print taken from the right index finger of the defendant. [It is my professional opinion that these two prints are a match.]

On cross-examination, the expert is asked how many points of similarity are required in order to make an identification.

The expert responds: There are no set requirements in the field that provide a minimum number of points of similarity between prints. It is up to individual experts, based on their own knowledge and experience. Some testify on the basis of 5 points of similarity while others require at least 12 points of similarity.

*Questionnaire*

1. As a juror, you are instructed to consider all of the evidence and arguments in this case carefully. You are to find against Aaron Beckett only if the evidence convinces you “beyond a reasonable doubt” that Mr. Beckett is guilty of burglary. What verdict would you return?

Not Guilty	Guilty

2. How confident are you in the verdict that you just made?

0%	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100%	

3. In your opinion, how certain must you be of a defendant’s guilt in order to vote guilty in a burglary case like this?

0%	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100%	

4. What is the likelihood that Aaron Beckett committed the crime?

0%	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100%	

5. How important was the alibi evidence when deciding your verdict (statements of defendant’s boss)?

1 Not important	2	3	4	5 Very Important

6. How important was the defense’s eyewitness testimony (the pawn shop owner) when deciding your verdict?

1 Not important	2	3	4	5 Very Important

7. How important was the prosecution's eyewitness testimony (the neighbor walking his dog) when deciding your verdict?

1 Not important	2	3	4	5 Very Important

8. How important was the fingerprint testimony when deciding your verdict?

1 Not important	2	3	4	5 Very Important

9. When deciding your verdict, how important was the fact that the stolen goods and money was not found on Beckett or in his house when he was apprehended?

1 Not important	2	3	4	5 Very Important

10. Do you think that the fingerprint evidence alone was sufficient to determine the verdict of Mr. Beckett in this case?

Yes	No

11. In general, how important would you rate fingerprint evidence in deciding a verdict?

1 Not important	2	3	4	5 Very Important

12. How many points of similarity were there between the defendant's print and the latent print recovered from the crime scene?

- A) 5 points of similarity
- B) 15 points of similarity
- C) Do not recall

13. What was the quality of the fingerprint recovered from the crime scene?

- A) Smudged
- B) Clear
- C) Do not recall

14. Did the fingerprint expert determine that the defendant's print and the latent print recovered from the crime scene were a match?

- A) Yes
- B) No
- C) Do not recall

15. Did you see a picture of the fingerprints?

- A) Yes
- B) No
- C) Do not recall

*Please answer the next set of questions to the best of your ability. You may not know all of the answers but please do your best and do not leave any blank.*

16. A teacher asks students, "What do you think will happen next?" The teacher is asking for a(n):

- A) hypothesis
- B) explanation
- C) principle
- D) prediction

17. Scientists think of scientific knowledge as:

- A) beliefs supported by repeatable, observable evidence
- B) unchanging eternal truths
- C) assumptions about the world

18. A scientist is attempting to learn something about differently colored apples. She takes bites out of a large sampling of green apples and finds them to be hard and sour. She takes bites out of another large group of green apples and finds them to be hard and sweet. Which of the following is a reasonable initial conclusion about apples in general?

- A) all apples are green and sour
- B) all apples are green and hard
- C) all green apples are hard
- D) all apples are green

19. The relationship between density, volume, and mass can be stated as follows:  $\text{density} = \text{mass}/\text{volume}$ . Which of the following is a proper conclusion based on this relationship?

- A) if the mass of an object increases, its density will increase regardless of volume
- B) if the volume of an object increases, its density will also increase
- C) if more matter is packed more tightly into a fixed volume, the density of that matter will increase
- D) if more matter is packed more tightly into a fixed volume, the density of that matter will decrease

20. A lunatic runs through the street screaming repeatedly, "The moon is made of Swiss cheese." Is such a statement scientific?

- A) Yes, even though the statement is wrong.
- B) Yes, because the moon is white and has holes.
- C) No, because the statement is wrong.
- D) No, because the moon is made of rocky materials

21. Making a prediction on the basis of logic, a hypothesis, or a theory is known as:

- A) empiricism
- B) deduction
- C) induction
- D) proof

22. Which of the following actions is a valid scientific course of action?

- A) A government agency relies heavily on two industry-funded studies in declaring a chemical found in plastics safe for humans, while ignoring studies linking the chemical with adverse health effects.
- B) Journalists give equal credibility to both sides of a scientific story, even though one side has been disproven by many experiments.
- C) A government agency decides to alter public health messages about breast-feeding in response to pressure from a council of businesses involved in manufacturing infant formula.
- D) Several research studies have found a new drug to be effective for treating the symptoms of autism; however, a government agency refuses to approve the drug until long term effects are known.

23. The most important factor influencing you to categorize a research article as trustworthy science is:

- A) the presence of data or graphs
- B) the article was evaluated by unbiased third-party experts
- C) the reputation of the researchers
- D) the publisher of the article



24. How often do you watch crime-related television shows?

1 Never	2	3 Sometimes	4	5 Very Often

25. How accurate do you view the processes of the criminal justice systems in these shows?

1 Not Accurate	2	3	4	5 Very Accurate

*Please answer the following demographic questions. This information will be used solely to describe the characteristics of respondents when reporting our results and will not be reported for individual jurors.*

26. What is your gender?

Male	Female	Other

27. How old are you? \_\_\_\_\_ years

28. What is your racial/ethnic background?

	White, non-Hispanic
	African American/Black, non-Hispanic
	Hispanic
	Asian
	Other

29. How many science courses have you taken in college? \_\_\_\_\_

30. How many math courses have you taken in college? \_\_\_\_\_

31. What college is your major in?

	Eberly College of Business
	Education and Communications
	Fine Arts
	Health and Human Services
	Humanities and Social Sciences
	Natural Sciences and Mathematics

32. Have you ever served in the military before?

Yes	No

33. How much contact have you had with police or law enforcement in the past?

1 Little to no contact	2	3	4	5	6 A great deal of contact

34. Are you a resident of Pennsylvania?

Yes	No

35. Are you a citizen of the United States of America?

Yes	No

## Debriefing

Thank you for participating! If you have questions or concerns about this study you can contact [REDACTED] at [REDACTED]@iup.edu .

Much of the evidence presented at trial is complex, particularly scientific evidence such as DNA and fingerprint evidence. There are concerns about lay people's (i.e., jurors') ability to adequately evaluate this type of evidence (Scurich & John, 2013). Research looking at how well jurors understand scientific evidence suggests that jurors can find some aspects of forensic evidence, like error rates, confusing. Other research however, suggests that jurors can appropriately evaluate some aspects of forensic evidence (Hans et al., 2011). In short, while there is mixed research about jurors' ability to comprehend data, the majority tends to side with the idea that regular jurors do not process and understand scientific evidence enough to fully comprehend it. In looking at fingerprints specifically, Reardon, Danielsen and Meissner (under review) found that jurors were sensitive to some aspects of this scientific evidence, such as the quality of the latent print, and the number of points of similarity between a latent print and defendant print. Jurors were insensitive to other aspects of the fingerprint evidence, including laboratory error rates.

The study you just participated in represents another attempt to examine how jurors evaluate fingerprint evidence. In this study we are specifically interested in whether jurors take evidentiary "shortcuts" when available instead of fully processing the complex evidence provided by the expert witness. For example, will jurors simply rely on an expert's declaration of a match instead of evaluating the quantitative aspects of the evidence? Similarly, will jurors be unduly influenced by visual aids of the fingerprint comparison? Research on information processing suggests that people are likely to take mental shortcuts, or to use peripheral processing, depending on various factors, such as the number of arguments someone makes, reactions of other people, or attractiveness or likeability of a person. We are further interested in whether a jurors' scientific literacy influences whether they rely on evidentiary shortcuts when available.

Hans, V. P., Kaye, D. H., Dann, B. M., Farley, E. J., & Albertson, S. (2011). Science in the jury box: Jurors' comprehension of mitochondrial DNA evidence. *Law And Human Behavior*, 35(1), 60-71. doi:10.1007/s10979-010-9222-8

Scurich, N., & John, R. S. (2013). Mock jurors' use of error rates in DNA database trawls. *Law And Human Behavior*, 37(6), 424-431. doi:10.1037/lhb0000046