**BUTLER UNIVERSITY**

**Institutional Review Board**

**Application for Expedited Approval or Full Approval**

**You must complete ALL sections of the application and answer every question** (i.e., your response to a question cannot refer to an attached document, such as a research proposal, that provides the answer)**.** Please download this application and type the requested information into the form. **Submission instructions: once the application is complete, including all of the required signatures, submit it to the Butler Institute for Research and Scholarship in Jordan Hall, Room 109 - one-sided pages only and no staples. You may also submit your application electronically. Once the application is complete, including all of the required signatures, you may scan the entire application package into one PDF file and send an electronic version to** [**IRB@butler.edu**](mailto:IRB@butler.edu)**.**

**You must submit a separate application for each project.**

Federal regulations limit IRB approval to one year (365 days) or less. At the end of this time, the PI must submit a written closure report or initiate a continuing review to extend the study beyond one year. **Please note that data collection may not begin until you have received an official letter of IRB approval from the Institute for Research and Scholarship.**

**Once the project is completed, the protocol must be closed and a statement of closure sent to the Institute for Research and Scholarship.**

To ensure that all required materials, besides the application, are included with the protocol when it is submitted, please review the checklist provided below. If any of these elements are being used in your research, be sure to include a copy of the item with your protocol. Your protocol will not be reviewed until all required materials are submitted.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Used in Research** | | **Included with Application** | |
|  | Yes | No | Yes | No |
| 1. Copy of any questionnaires and/or measures to be completed by participants |  |  |  |  |
| 2. List of interview questions |  |  |  |  |
| 3. Copy of data collection table and/or data coding schemes |  |  |  |  |
| 4. Informed consent statement |  |  |  |  |
| 5. Assent statement for research involving children who are capable of providing assent |  |  |  |  |
| 6. Debriefing script for research involving deception |  |  |  |  |

**Completion of the appropriate modules of the CITI training by the Principal Investigator, the Student Researcher and all Key Personnel is required before submitting your IRB application. Your application will not be reviewed until the BIRS office has been notified by CITI that all investigators listed on the application have completed this training.**

**Have all investigators associated with the research (PI, student researcher and people listed as key personnel) completed the appropriate modules of the CITI training?**

Yes  No

**A. INVESTIGATOR INFORMATION**

**Principal Investigator:**

Name:  Robert J. Padgett Phone: (317) 940-9239 Date: 4/23/15  
(must be faculty, staff, or the sponsor of student research)

Campus Address: 4600 Sunset Ave. JH296 E-mail: rpadgett@butler.edu Department/College: Psychology/LAS  
Select:  Faculty  Staff

**Student Researcher (if applicable):**

Name: Katie Kincaid Phone: (317) 358-7515 Department/College: Psychology/LAS

Local Address: 630 W. Hampton Drive City: Indianapolis State: IN Zip Code: 46208

E-mail: kmkincai@butler.edu

**B. BASIC PROTOCOL INFORMATION**

Project Title: Extroversion and intelligence: A novel Implicit Association Test

Anticipated dates of data collection: date of IRB approval to 5/1/16 (Note: If your actual data collection will extend beyond the end date specified on your application, you must submit a request for an extension of your IRB approval.)

Anticipated dates of data analysis: 8/26/15 to 5/1/16

Length of time for data storage: 2 years (note: health-related and medical data is required by law to be kept for 7 years)

Does the Research require approvals from other organizations or IRBs?

Yes No

If YES, state where:

Status:  Pending  Approval received (copy attached)

Is this project being performed away from the main Butler University campus? (Note: If data is being collected using an online survey, such as survey monkey, choose NO)

Yes No

If YES, what other sites:

Is this project being funded?

Yes No If YES, please indicate funding source:

The IRB is responsible for reviewing all research involving the use of human participants. The IRB determines which type of review your protocol will receive. Please consult the guidelines and then check the type of review you believe applies.

Full  Expedited

**C. KEY PERSONNEL**

List all additional investigators involved in this project. This includes all personnel involved in collecting and analyzing data.

Name: Andy Patterson

Department: Indiana University/Computer Science

Position: Research Assistant

Phone: (317) 504-5927

Mailing Address (if not at Butler): 509 South Swain Avenue / Bloomington, Indiana 47401

E-mail: andnpatt@indiana.edu

**D. OTHER CONSIDERATIONS**

1. Is participation in this research required by reason of a participant's employment?

Yes No

2. Is participation in this research required to receive a particular service?

Yes No

3. Does this research involve the evaluation of a program or service?

Yes No

**E. SUMMARY OF PROJECT**

Provide a brief summary (3 to 5 sentences) in lay terms of the purpose of your study.

This study will examine how people perceive introverts and extroverts. Primarily, the study presents a novel Implicit Association Test (IAT), which measures people's implicit or unconscious attitudes. This IAT will assess how easily people associate introversion or extroversion with intelligence. We hypothesize that participants will have more difficulty associating introversion with intelligence than they do associating extroversion with intelligence, resulting in IAT scores that indicate a bias towards extroverts.

**F. BACKGROUND**

Describe the Purpose of the study. It should include: a) a brief description of prior, relevant research findings; b) the hypotheses to be tested or research questions to be addressed; and c) the potential knowledge to be gained. Please limit to 1 page.

Implicit attitudes are unconscious and automatic attitudes of which the holder is unaware. Implicit Association Tests (IATs) measure implicit attitudes by measuring their underlying evaluative associations. Evaluative associations are assessed using differential association of two target groups with a specific attribute (Greenwald, McGhee, & Schwartz, 1998). Thus, the IAT prcedure seeks to measure socially significant association structures.

Prior research suggests that teachers may perceive introverted children as less intelligent and less likely to succeed academically. Coplan, Hughes, Bosacki, & Rose-Krasnor (2011) presented teachers with vignettes of hypothetical children, who were either engaged in shy/quiet behavior, typical behavior, or exuberant/talkative behavior. The teachers rated the shy/quiet children as significantly less intelligent and less academically capable than the typical and exuberant children. Some of these results were moderated by the teachers' own levels of introversion, such that more introverted teachers were less likely to rate the introverted children as less intelligent. These findings suggest that teachers may associate extroversion with greater intelligence and academic ability.

The present study aims to test four major hypotheses. Primarily, we hypothesize that people automatically associate extroversion with intelligence and academic ability. We expect this implicit attitude to manifest itself in the IAT, in that scores will suggest an automatic association of extroversion with intelligence. Second, we hypothesize that this implicit attitude is stronger among people in the field of education. In the present study, we expect that preservice teachers will have stronger association scores than students of other academic majors. Third, we hypothesize that the association of extroversion with intelligence will be moderated by the participants' own levels of extroversion, such that introverts will show a weaker association than will extroverts. Finally, we hypothesize that implicit attitudes about introverts are related to explicit attitudes about introverts. We expect that self-reported beliefs about extroverts will be correlated with IAT scores.

Results from this research will contribute to the existing literature and increase our understanding of introversion as a whole. We will learn more about evaluative associations with introversion. Further, we will discover whether there are differences in these evaluations between education and non-education students, and between introverted and extroverted students. Similarly, we will learn about the extent to which evaluative associations of introverts are related to explicit evaluations of introverts.

**G. PROCEDURES**

Describe the procedures participants in your study will undergo. Describe specifically what participants will be asked to do and the approximate time involvement for each participant. Also describe all types of data that will be collected from (or about) participants and where or how the data will be collected.

Participants will complete this study entirely online. First, participants will complete a series of demographic questions regarding gender, age, year in school, and major(s). They will be asked to provide a rating of their own extraversion and complete a series of questions from the Big Five Inventory, which will assess their extroversion. Participants will then answer questions regarding their explicit beliefs about introverts and extroverts. Next, participants will be asked to complete the Implicit Association Test (IAT), a timed word-sorting task. Words will appear on the center of the screen and participants will be asked to sort the words into two categories which appear on the left and right side of the screen. The IAT will be conducted in five phases. In the first phase, participants will see words associatied with introverts or extroverts and be asked to sort the words into the category of introverted or extroverted. Examples of these words include shy, quiet, reserved, and outgoing, sociable, talkative. In the second phase, participants will see words associated with intelligence or a lack thereof. These include words such as smart, bright, intelligent, and unintelligent, fool, and ignorant. Participants will then be asked to sort these words into the two categories of good and bad. In the third phase, all of these different words will be intermixed. Participants will see words associated with introversion and extroversion as well as intelligence and ignorance. Partcipants will be asked to sort words related to introverts and intelligence to a single category on the right, while they sort words related to extroverts and ignorance to a single category on the left. In the fourth phase, participants will once again sort only words related to introversion and extroversion, however the sides associated with either category will switch. This means that if words associated with introverts were originally sorted to the category on the right, they will flip and be sorted to the category on the left. In the fifth and final phase, all of the words will once again be intermixed. This time, however, words associated with extroverts and intelligence will sorted to the right, while words associated with introverts and ignorance will be sorted to the left. The entire study should last approximately 20 minutes.

**H. PARTICIPANTS**

Check whether you anticipate having participants in your research that fit into any of the categories below:

Children (<18years)  Cognitively Impaired

Prisoners  Agency Administrators/Staff

Clients/Patients  Pregnant women

People who live overseas  Non-English speakers

Students

1. Anticipated number of participants: 200

2. Age range(s): 18-23

3. Sex:  Male  Female  Both

4. Describe the anticipated race/ethnicity of your participants:

Participants will be of all races.

5. Will you be selecting participants based upon health-related criteria?

Yes  No

If yes, describe the criteria you will use.

6. Will any of your participants be from vulnerable populations either because they might possess limited or diminished mental capacity (e.g. children, people with dementia) or because they might be subject to undue influence (e.g. subjects in hierarchical social structures, such as employees or students, subjects who are economically or educationally disadvantaged, subjects who are marginalized in society, subjects with fatal or incurable diseases, subjects in emergency situations)?

Yes  No

If yes, describe the nature of their vulnerability and the procedures you will use to ensure that these individuals are not subject to coercion or undue influence from others.

Students are a vulnerable population because there is a risk they may be subjected to undue influence or feel coerced into participation. This risk will be mitigated by providing students with alternatives so they do not feel forced into participating in this study. Students will be assured that they can withdraw from the study or decline to participate at any time and still receive extra credit. Additionally, there are many studies to choose from on Sona, so students could choose to participate in a different study for extra credit. In some courses, students may be able to complete an alternative assignment for extra credit.

7. Describe the procedures for participant recruitment. Attach proposed announcements, fliers, advertisements, etc., if applicable.

Participants will be recruited from various psychology courses through the Butler Sona system.

8. Will participants be paid for their participation or offered an incentive to participate?

Yes  No

If YES, describe.

Participants will be offered extra credit for their participation.

**I. RISK/BENEFIT ASSESSMENT**

1. Does this study involve any of the following elements?

YES NO

Deception (If **yes**, you must submit your debriefing script.)

Punishment

Use of drugs

Biomedical procedures

Procedures which might cause physical harm to participant

Covert and/or participant observation

Induction of mental and/or physical stress

Materials and behaviors commonly regarded as

socially unacceptable

Procedures that might be regarded as an invasion of

privacy

Collection of information that, if disclosed, could place the participant at risk for criminal or civil liability or be harmful to participant’s financial standing, employability, insurability or reputation

If you answered “yes” to any of the above, describe specifically how it will be incorporated into the study procedures, provide the rationale for using it and discuss any potential risks associated with its use. Describe also the procedures you will use to mitigate these risks as well as any provisions for ensuring necessary professional intervention in the event of a distressed participant.

2. Describe any other potential risks to the participants in the study besides those above. You should consider potential physical, psychological, social, legal or other risks. For all potential risks, assess the likelihood of their occurring and their seriousness, even if you think these risks will be avoided. Describe the procedures you will use to mitigate these risks as well as any provisions for ensuring necessary professional intervention in the event of a distressed participant.

There are no other potential risks.

3. Describe the potential benefits of your research to the participants and/or to society in general.

This research will benefit society by coributing to the existing literature on the ways in which introverts and extroverts are differentially perceived. Similarly, this research has potential to raise awareness of implicit evaluative associations with introverts and extroverts.

**J. CONFIDENTIALITY ISSUES**

1. Will data be collected anonymously (i.e. so that no one, *not even the researchers or any research assistants involved in data collection*, can determine which participant provided which data)?

Yes  No

If you answered **YES**, explain the procedures used to ensure anonymity.

If you answered **NO** to #1, describe procedures for keeping data confidential (i.e., for ensuring that even though the researchers could determine which participant provided which data, no third party could gain access to the data and determine who provided the data). Be sure to explain where and how the data will be stored both *during* the data collection process *and after* the study is concluded since this will affect the confidentiality of the data.

Participants will be asked to report their name solely for the purpose of ensuring that all participants receive credit for their participation through Sona. This information will be stored online using LimeSurvey, where it will be password protected. Once participants have completed the survey and been granted credit through Sona, their names will be removed from the data and no identifying information will remain.

2. Will data from each participant be collected at more than one point in time or from more than one setting?

Yes  No

If YES, explain the procedures you will use to connect the various pieces of data from each participant and how these procedures will protect the confidentiality of participant data.

3. Will you be audio/video taping participants or photographing them?

Yes  No

If YES, provide the rationale for video/audio-taping or photographing participants. Describe how the recordings/photographs will be used (e.g. shown at scientific meetings, transcribed and/or coded etc.) and how they will be stored to ensure confidentiality of participant data. Finally, describe what you will do with the recordings/photographs when the study is concluded (i.e., will they be destroyed/erased or archived?).

**K. INFORMED CONSENT**

Please describe the process that will be used to obtain informed consent. If your research involves the use of minors, you must get informed consent from the participant’s parent or legal guardian. If the minors are of an age where it would be appropriate to get their agreement to participate in the research, you should also describe the procedures for getting participant assent. Make sure your informed consent statement is free from grammatical errors, and that it is written clearly and at a level that will be understandable to your participants. If the first language of your participants is not English, it may be necessary to have your consent/assent form translated into the primary language of your participants to ensure their understanding.

1. Who will obtain consent (and assent, if applicable)?

The student researcher will obtain consent from each participant.

2. How will consent (and assent, if applicable) be obtained?

Before the experiment begins, the online survey will display the informed consent agreement and participants will be asked to select either "Yes, I agree to participate" or "No, I would like to withdraw without penalty" in response to the statement "I have read the description of this study and agree to participate."

3. When will consent (and assent, if applicable) be obtained?

Consent will be obtained at the very beginning of the study, before participants complete any other portion of the experiment.

4. How will you verify that the participant fully understands the consent (and assent, if applicable)?

The contact information of both the student researcher and the principal investigator will be provided along with the informed consent. Participants will be informed that they may ask questions of the researchers before continuing and completing the online portions.

5. Do you wish to waive the requirement of documenting informed consent? (i.e., participants will receive a statement of consent, but will not be asked to sign the form and no written record of the consent will be kept by the researchers)?

Yes  No

If YES, explain why (see 45 CFR 46.117 (c) for the conditions which must be met for this waiver to be approved).

6. Do you wish to alter any of the elements of informed consent or waive the requirement of getting informed consent from participants prior to their participating in your research?

Yes  No

If YES, explain why (see 45 CFR 46.116. (c) or (d) for the conditions which must be met for this waiver to be approved).

**L. CERTIFICATION**

I certify that the protocol and the method of obtaining Informed Consent as approved by the IRB will be followed during the period of this research project. Any changes of protocol, investigator, consent, or recruiting of participants will be submitted for IRB review and approval before implementation. Any adverse reactions or participant complaints will be promptly reported to

Butler University’s Institute for Research and Scholarship ([birs@butler.edu](mailto:birs@butler.edu)). This research will be conducted only with the approved faculty investigator and, if any, student investigator(s). All records of this research will be maintained as required by the Institute for Research and Scholarship (see: http://www.butler.edu/birs)

Principal Investigator Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:

(faculty or staff) *Required if investigator is student*

Student Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_

IRB DECISION

Approved as Expedited

Approved as Full

Resubmission requested

Not Approved

IRB Chair: ­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date

**FOR OFFICE USE ONLY**

DATE APPLICATION RECEIVED:

DATE SENT TO CHAIR:

DATE SENT TO:

EXPEDITED REVIEWER:

FULL COMMITTEE:

DATE COMMENTS SENT TO CHAIR:

DECISION BY CHAIR:

DATE LETTER SENT: