

# Protocol Details

## Basic Info

Confirmation Number: **biighgii**  
Protocol Number: **823240**  
Created By: **DUCKWORTH, ANGELA L**  
Principal Investigator: **DUCKWORTH, ANGELA L**  
Protocol Title: **Grit and Self-control**  
Short Title: **Grit and Self-control**  
Protocol Description: **The purpose of the current study is to investigate the relationship between a variety of psychological variables (e.g. grit and self control).**  
Submission Type: **Social and Biological Sciences**  
Application Type: **EXEMPT Category 2**

## Resubmission\*

No

## Hospital Sites

Will any research activities and/or services be conducted at a Penn Medicine affiliated hospital site?

No

## Study Personnel

### Principal Investigator

Name: **DUCKWORTH, ANGELA L**  
Dept / School / Div: **120 - Psychology**  
Campus Address: **6241**  
Mail Code:  
Address: **PSYCHOLOGY  
3720 WALNUT STREET**  
City State Zip: **PHILADELPHIA PA 19104-6241**  
Phone: **215-898-1339**  
Fax: **-**  
Pager:  
Email: **duckwort@sas.upenn.edu**  
HS Training Completed: **Yes**  
Training Expiration Date:  
Name of course completed : **CITI Protection of Human Subjects Research Training - ORA**  
GCP Training Completed: **No**  
Training Expiration Date:  
Name of course completed :

### ***Study Contacts***

Name:	<b>NESTERAK, EVAN</b>
Dept / School / Div:	<b>120 - Psychology</b>
Campus Address	<b>6241</b>
Mail Code	
Address:	<b>PSYCHOLOGY 3720 WALNUT ST</b>
City State Zip:	<b>PHILADELPHIA PA 19104-6241</b>
Phone:	<b>215-898-7302</b>
Fax:	<b>-</b>
Pager:	
Email:	<b>evannest@sas.upenn.edu</b>
HS Training Completed:	<b>Yes</b>
Training Expiration Date:	
Name of course completed :	<b>CITI Protection of Human Subjects Research Training - ORA</b>
GCP Training Completed:	<b>No</b>
Training Expiration Date:	
Name of course completed :	

### ***Other Investigator***

Name:	<b>KAUFMAN, SCOTT B</b>
Dept / School / Div:	<b>242 - Positive Psychology Center</b>
Campus Address	<b>6241</b>
Mail Code	
Address:	<b>PSYCHOLOGY 3720 WALNUT ST</b>
City State Zip:	<b>PHILADELPHIA PA 19104-6241</b>
Phone:	<b>-</b>
Fax:	<b>215-573-2188</b>
Pager:	
Email:	<b>sbk@psych.upenn.edu</b>
HS Training Completed:	<b>Yes</b>
Training Expiration Date:	
Name of course completed :	<b>CITI Protection of Human Subjects Research Training - ORA</b>
GCP Training Completed:	<b>No</b>
Training Expiration Date:	
Name of course completed :	

### **Responsible Org (Department/School/Division):**

120 - Psychology

### ***Key Study Personnel***

Name:	<b>NESTERAK, MAXWELL</b>
Department/School/Division:	<b>Research Services</b>
HS Training Completed:	<b>Yes</b>
Training Expiration Date:	
Name of course completed:	<b>CITI Protection of Human Subjects Research Training - ORA</b>
GCP Training Completed:	<b>No</b>
Training Expiration Date:	
Name of course completed:	

Name:	<b>WHITE, RACHEL E</b>
Department/School/Division:	<b>Psychology</b>
HS Training Completed:	<b>Yes</b>
Training Expiration Date:	
Name of course completed:	<b>CITI Protection of Human Subjects Research Training - ORA</b>
GCP Training Completed:	<b>No</b>
Training Expiration Date:	
Name of course completed:	

Name:	<b>BAELEN, REBECCA L</b>
Department/School/Division:	<b>Education</b>
HS Training Completed:	<b>Yes</b>
Training Expiration Date:	
Name of course completed:	<b>CITI Protection of Human Subjects Research Training - ORA</b>
GCP Training Completed:	<b>No</b>
Training Expiration Date:	
Name of course completed:	

Name:	<b>ESKREIS-WINKLER, LAUREN</b>
Department/School/Division:	<b>Research Services</b>
HS Training Completed:	<b>Yes</b>
Training Expiration Date:	
Name of course completed:	<b>CITI Protection of Human Subjects Research Training - ORA</b>
GCP Training Completed:	<b>No</b>
Training Expiration Date:	
Name of course completed:	

Name:	<b>MEKETON, DAVID</b>
Department/School/Division:	<b>Psychology</b>
HS Training Completed:	<b>Yes</b>
Training Expiration Date:	
Name of course completed:	<b>CITI Protection of Human Subjects Research Training - ORA</b>
GCP Training Completed:	<b>No</b>
Training Expiration Date:	
Name of course completed:	

Name:	<b>MATTEUCCI, ALYSSA J</b>
Department/School/Division:	<b>Institute for Social Impact</b>
HS Training Completed:	<b>Yes</b>
Training Expiration Date:	
Name of course completed:	<b>CITI Protection of Human Subjects Research Training - ORA</b>
GCP Training Completed:	<b>No</b>
Training Expiration Date:	
Name of course completed:	

Name:	<b>PARK, DAEUN</b>
Department/School/Division:	<b>Psychology</b>
HS Training Completed:	<b>Yes</b>
Training Expiration Date:	
Name of course completed:	<b>CITI Protection of Human Subjects Research Training - ORA</b>
GCP Training Completed:	<b>No</b>
Training Expiration Date:	
Name of course completed:	

Name:	<b>YU, ALISA</b>
Department/School/Division:	<b>Psychology</b>
HS Training Completed:	<b>Yes</b>
Training Expiration Date:	
Name of course completed:	<b>CITI Protection of Human Subjects Research Training - ORA</b>
GCP Training Completed:	<b>No</b>
Training Expiration Date:	
Name of course completed:	

#### **Disclosure of Significant Financial Interests\***

Does any person who is responsible for the design, conduct, or reporting of this research protocol have a **FINANCIAL INTEREST**?  
No

#### **Penn Intellectual Property\***

To the best of the Principal Investigator's knowledge, does this protocol involve the testing, development or evaluation of a drug, device, product, or other type of intellectual property (IP) that is owned by or assigned to the University of Pennsylvania?

#### **Certification**

I have reviewed the *Financial Disclosure and Presumptively Prohibited Conflicts for Faculty Participating in Clinical Trials* and the *Financial Disclosure Policy for Research and Sponsored Projects* with all persons who are responsible for the design, conduct, or reporting of this research; and all required Disclosures have been attached to this application.

Yes

## **Social and Biological Sciences**

#### **Study Instruments**

Discuss the particulars of the research instruments, questionnaires and other evaluation instruments in

detail. Provide validation documentation and or procedures to be used to validate instruments. For well know and generally accepted test instruments the detail here can be brief. More detail may be required for a novel or new instrument. For ethnographic studies identify any study instruments to be used (i.e. for deception studies) and describe in detail where, when and how the study will be conducted and who or what are the subjects of study. Note: For more information on how to conduct ethical and valid ethnographic research, follow the link [For oral histories or interviews provide the general framework for questioning and means of data collection](#). If interviews or groups settings are to be audio taped or video taped describe in detail the conditions under which it will take place. Include a copy of any novel or new test instruments with the IRB submission.

The study instruments will consist of demographic questions (e.g., age, gender, ethnicity), as well as questions about character (e.g. motivation, self-control, interests, purpose) or other closely-related constructs. Also, included will be measures of intelligence, such as Raven's Matrices or other closely-related measures.

### **Group Modifications**

Describe necessary changes that will or have been made to the study instruments for different groups.

N/A

### **Method for Assigning Subjects to Groups**

Describe how subjects will be randomized to groups.

If a portion of the survey is randomized, subjects will be randomized using logic built into Qualtrics survey software, or a similar program.

### **Administration of Surveys and/or Process**

Describe the approximate time and frequency for administering surveys and/or evaluations. For surveys, questionnaires and evaluations presented to groups and in settings such as high schools, focus group sessions or community treatment centers explain how the process will be administered and who will oversee the process. For instance, discuss the potential issues of having teachers and other school personnel administer instruments to minors who are students especially if the content is sensitive in nature. Describe the procedure for audio and videotaping individual interviews and/or focus groups and the storage of the tapes. For instance, if audio tape recording is to be used in a classroom setting, describe how this will be managed if individuals in the class are not participating in the study. Explain if the research involves the review of records (including public databases or registries) with identifiable private information. If so, describe the type of information gathered from the records and if identifiers will be collected and retained with the data after it is retrieved. Describe the kinds of identifiers to be obtained, (i.e. names, social security numbers) and how long the identifiers will be retained and justification for use.

All data will be collected via questionnaires from participants on Amazon MTurk, professional survey administration and data collection firms such as Qualtrics, or university student body.

### **Data Management**

Describe how and who manages confidential data, including how and where it will be stored and analyzed. For instance, describe if paper or electronic report forms will be used, how corrections to the report form will be made, how data will be entered into any database, and the person(s) responsible for creating and maintaining the research database. Describe the use of pseudonyms, code numbers and how listing of such identifiers will be kept separate from the research data.

All data collected in this study will be considered confidential. MTurk (or university student body) participants will be given a link to a Qualtrics survey when they enter the study, and consequently, all data will be collected and stored on the Qualtrics server short-term. Qualtrics is a secure, password-protected online database. After participants have completed the study, their data will be transferred to a password-protected server at the Positive Psychology Center at the University of Pennsylvania. Data may be collected in paper format in the event online collection is not an option. In this case all files will be kept locked in a secure filing cabinet in the Penn Positive Psychology Center accessible to only relevant research personnel. No identifiable information will be collected in this study.

### **Human Source Material\***

Does this research include collection or use of human source material (i.e., human blood, blood products, tissues or body fluids)? IF YES, consult the EHRS web site: [www.ehrs.upenn.edu/programs/bio/bbpathogens.html](http://www.ehrs.upenn.edu/programs/bio/bbpathogens.html) for information on OSHA Bloodborne Pathogens requirements (training, vaccination, work practices and Exposure Control Plan). If you have questions, call 215-898-4453.

No

**Image Guided Biopsies\***

Does the research involve imaging guided biopsy? IF YES, please contact the Clinical Imaging Core. See <https://www.med.upenn.edu/cbi> for more details. Any questions should be directed to the Director of Research Operations, Dept of Radiology, Kathleen Thomas.

No

**HIPAA / Protected Health Information**

Does the research proposal involve accessing (viewing / using), collecting, or disclosing of protected health information (PHI) directly from participants or their medical or dental record for research purposes?

No

**CHPS Resources\***

Does the research involve CHPS resources?

No

**HUP Inpatient Nursing Resources**

Does this research include an inpatient admission at HUP?

No

**If the answer is YES, indicate which items is is provided with this submission:**

**Use of UPHS services\***

Does your study require the use of University of Pennsylvania Health System (UPHS) services, tests or procedures , whether considered routine care or strictly for research purposes? (UPHS includes all Penn hospitals and clinical practices, including the Clinical Care Associates network of community practices). Examples of UPHS services/tests/procedures includes the Clinical Translational Research Center (CTRC), laboratory tests, use of the pathology lab, cardiovascular imaging tests or radiology imaging tests (whether being billed via the Service Center or through UPHS), other diagnostic tests & procedures and associated professional services, etc.

No

**Veteran's Affairs (VA) Patients or Subjects**

Does your study involve data from Veteran's Affairs (VA) patients or subjects?

No

**If yes, was this approved by the Philadelphia VA?**

No

**Out of State Research**

Will any Penn personnel conduct any research activities outside of the State of Pennsylvania?

No

**Research involving Virtua Health**

Will any Penn personnel conduct any research activities at a Virtua Health site location, OR in collaboration with Virtua Health System personnel, OR using any Virtua Health System resources (e.g., medical records)?

No

**Primary Focus\***

Sociobehavioral (i.e. observational or interventional)

## Protocol Interventions

- Sociobehavioral (i.e. cognitive or behavioral therapy)
- Drug
- Device - therapeutic
- Device - diagnostic (assessing a device for sensitivity or specificity in disease diagnosis)
- Surgical
- Diagnostic test/procedure (research-related diagnostic test or procedure)
- Obtaining human tissue for basic research or biospecimen bank
- Survey instrument
- ☒ None of the above

The following documents are currently attached to this item:

*There are no documents attached for this item.*

### Department budget code

None

## Protocol

### Objectives

#### Overall objectives

The purpose of the study is to understand how a range of demographic and psychological variables relate to grit and self-control.

#### Background

Grit is a character trait defined as passion and perseverance for long-term goals. Grit predicts a stunning array of achievement outcomes (Duckworth et al. 2007) , including performance in the National Spelling Bee, undergraduate GPA, and graduation from the Chicago Public Schools. The plethora of evidence linking grit to achievement has raised public awareness about the role of character strengths in a variety of situations including education (Tough, 2012), work, and athletics to name a few. Self-control is also one of the most studied constructs in psychology. It has too been linked to achievement and success. We hope to examine how grit, one of the newest psychological constructs, and self-control one of the most well-studied constructs relates to one another, measures of intelligence, as well as other psychological variables such as passion, motivation, thinking style, purpose, interest, and effort.

### Study Design

#### Design

The current investigation will involve administering a series of self-report and intelligence measures to participants. Participants may be randomized to receive certain questions using the logic built into the Qualtrics survey program.

#### Study duration

Individual participants will spend roughly 15 minutes to an hour participating in the study.

# Characteristics of the Study Population

## Target population

MTurk participants, participants in professional survey administration and data collection firms (e.g. Qualtrics) and university student body.

## Subjects enrolled by Penn Researchers

5000

## Subjects enrolled by Collaborating Researchers

0

## Vulnerable Populations

### Children Form

Pregnant women (if the study procedures may affect the condition of the pregnant woman or fetus) Form

Fetuses and/or Neonates Form

Prisoners Form

Other

☒ None of the above populations are included in the research study

## The following documents are currently attached to this item:

*There are no documents attached for this item.*

## Participant recruitment

Please describe the plan to equitably identify and recruit a diverse group of participants that is reflective of the population under study. If this is a multicenter protocol, the recruitment plan should describe the local (Penn) site's plan. Describe:how potential participants may be identified (review of medical records, Slicer Dicer, DAC reports including referrals from physician offices and clinics);who may approach potential participants;methods to achieve sample diversity and inclusiveness;what information may be presented to or discussed with them; andthe context and setting in which recruitment will happen.

Participants will be self-selected through the Amazon MTurk system, or through professional survey administration and data collection firms (e.g. Qualtrics). University student body may be recruited through other online systems (e.g., Experimetrix).

## Recruitment Materials

Is the research team using any recruitment materials? These may include but are not limited to: phone call scripts, radio/video scripts, flyers/brochures, internet postings, email, letters to potential participants, letters to patient physicians, My Penn Medicine (MPM), other direct messaging, etc. For guidance regarding recruitment materials, please review the IRB's guidance on Participant Recruitment Materials online:<https://irb.upenn.edu/mission-institutional-review-board-irb/guidance>

No

## Use of Penn Media & Social Media Services

Will the recruitment plan propose to use any Penn media services (communications, marketing, etc.) for outreach via social media avenues (examples include: Facebook, Twitter, blogging, texting, etc.) or does the study team plan to directly use social media to recruit for the research?

No

## The following documents are currently attached to this item:

*There are no documents attached for this item.*

## Subject compensation\*

Will subjects be financially compensated for their participation?

Yes



**The following documents are currently attached to this item:**

*There are no documents attached for this item.*

**If there is subject compensation, provide the schedule for compensation per study visit or session and total amount for entire participation, either as text or separate document**

Participants recruited via Mturk will be paid in line with Mturk standards. Participants recruited via professional survey administration and data collection firms (e.g. Qualtrics) will be paid in line with their standards. University student body participants will be compensated either through course credit or payment. Payment will be determined by the length of the survey. According to current standards we expect to pay participants at minimum between \$0.50 and \$1 per 30 minutes of survey time.

## Study Procedures

### Suicidal Ideation and Behavior

Does this research qualify as a clinical investigation that will utilize a test article (ie- drug or biological) which may carry a potential for central nervous system (CNS) effect(s)? Central nervous system(CNS) effect: the ability of a test article to enter into and potentially interact with the central nervous system (brain and spinal cord). Clinical Investigation: Any experiment that involves a test article and one or more human subjects that either is subject to requirements for prior submission to the Food and Drug Administration (FDA) under section 505(i) or 520(g) of the Federal Food, Drug, and Cosmetic Act, or is not subject to the requirements for prior submission to the FDA under these sections of the act, but, the results of which are intended to be submitted later to, or held for inspection by, the FDA as part of an application for a research or marketing permit.

No

### Procedures

Individuals will consent to participate on the first page/screen of the survey. Those who consent to participate will complete questionnaires, lasting roughly 15 minutes to one hour. The questionnaires will include demographic questions (e.g., age, gender, ethnicity), as well as questions about motivation, self-control, interests, purpose, or other closely-related constructs (e.g., creativity). Also, included will be measures of intelligence, such as Raven's Matrices or other closely-related measures.

**The following documents are currently attached to this item:**

*There are no documents attached for this item.*

### Deception

Does your project use deception? Deception could be considered any direct misinformation presented to the subject or omission of key information pertaining to the design or nature of the project.

No

### International Research

Are you conducting research outside of the United States?

No

### Analysis Plan

We will performance within subject correlations, intra-subject correlations, as well as regressions. We will also perform parametric and non-parametric statistical methods (e.g., bivariate correlations, ANOVA, regression) when appropriate.

**The following documents are currently attached to this item:**

*There are no documents attached for this item.*

### Subject Confidentiality

No identifying information will be collected, and data will be kept on a secure, password-protected server at the Positive Psychology Center, with no identifiers attached. If materials are hard copy, they

will be kept in a secure filing cabinet at the Penn positive psychology center. Only the Principal Investigator and the trained personnel working on this study will have access to these files. No individual names will appear in any publication.

#### **Sensitive Research Information\***

Does this research involve collection of sensitive information about the subjects that should be excluded from the electronic medical record? [NOTE: This does not apply to: 1) research information that would not normally be included in the electronic medical record or 2) information that is in the electronic medical record as part of clinical care.]

No

#### **Disclosures**

Will any data or specimens from Penn participants OR other research generated work product (e.g., intellectual property) be disclosed to any individuals, entities, or vendors, etc. outside of Penn?

No

#### **Data Protection\***

**Name**

**Street address, city, county, precinct, zip code, and equivalent geocodes**

**All elements of dates (except year) for dates directly related to an individual and all ages over 89**

**Telephone and fax number**

**Electronic mail addresses**

**Social security numbers**

**Medical record numbers**

**Health plan ID numbers**

**Account numbers**

**Certificate/license numbers**

**Vehicle identifiers and serial numbers, including license plate numbers**

**Device identifiers/serial numbers**

**Web addresses (URLs)**

**Internet IP addresses**

**Biometric identifiers, incl. finger and voice prints**

**Full face photographic images and any comparable images**

**Any other unique identifying number, characteristic, or code**

☒ **None**

Does your research request both a waiver of HIPAA authorization for collection of patient information and involve providing Protected Health Information ("PHI") that is classified as a "limited data set" (city/town/state/zip code, dates except year, ages less than 90 or aggregate report for over 90) to a recipient outside of the University of Pennsylvania covered entity?

No

## **Consent**

### ***1. Consent Process***

#### **Overview**

Participants will be given full information about the use of information we request from them, and will be given full disclosure about our expectations of them. In the study's consent form (attached as a

document), the voluntary and confidential nature of participation will be emphasized. Participants will be informed that at any point during the survey they may withdraw without explanation.

## **Risk / Benefit**

### **Potential Study Risks**

No significant risks are foreseen for this study as no attempt will be made to gather identifying information or to identify participants. In addition, all data will be transmitted to Penn servers in de-identified format.

### **Potential Study Benefits**

The primary benefit of this study is an increased understanding of how a range of demographic and psychological variables relate to effort and self-control.

### **Risk / Benefit Assessment**

The minimal risks to participants in this study suggests an acceptable risk/benefit ratio.

## **General Attachments**

***The following documents are currently attached to this item:***

**Informed consent form (grit\_self-control\_consent.docx)**

**Questionnaires (grit\_self-control\_irb\_8.11.15.docx)**

**Cover Letter (grit\_self-control\_irb\_cover\_letter.docx)**

**Questionnaires (largegritsurveycodebook\_7.2.2015\_ern.docx)**