Student Research Handbook

Psychology Department
Southern Utah University
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Part A: Guide for Student Participants (Participants in Research Studies)

1. Introduction

Research is central to the science of psychology. To enrich your understanding of psychological research, the Psychology Department has arranged for you to experience the research process first hand, as a research participant. Each student in Psychology 1010 courses, as designated by your professor, should participate in the research process as a participant. Students in other classes sometimes also participate. Typical psychology research activities include filling out surveys or participating in an experiment. Students who do not wish to participate as a research participant may opt to complete an alternative assignment as approved by your professor. Your participation is appreciated and will contribute to the discovery of knowledge to benefit humankind.

2. Sona

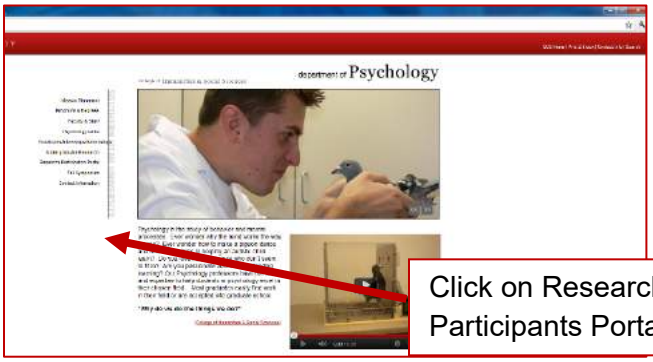
SUU Psychology

If you are a student in a PSY1010 class, a Sona account will be automatically created for you. "Sona" is the webpage that the Psychology Department uses to organize your research opportunities and record your research credits as you get them. To see studies for which you may be eligible, sign-up for them, and participate, follow this link:

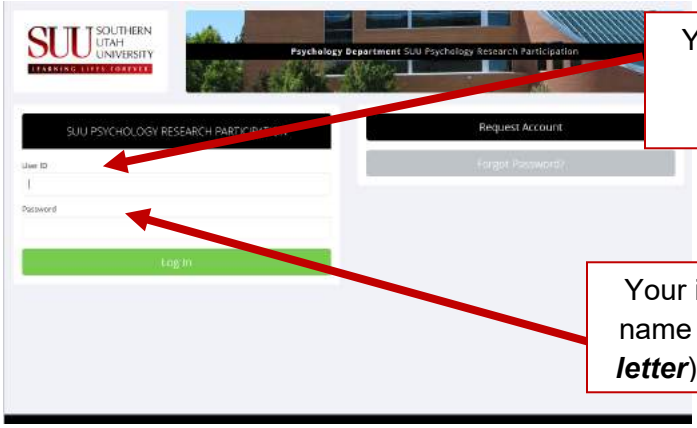
http://suuresearch.sona-systems.com/

Alternatively, go to the SUU Psychology Department webpage then click on the link on the left called "Research Participation Portal".

https://www.suu.edu/hss/psychology/



Once you get to the Sona website, this is what you will see. Here you can login to view or sign-up for research opportunities.



Student Participant Sona (FAQs) Frequently Asked Questions

1. **How do I get an account?**
   An account will be made automatically for you. This occurs soon after the last day to drop classes and get a full refund. Sona will use the email address that is associated with your regular SUU account. That email address will be sent a notification when an account is made for you. Check your spam folder; sometimes the notification emails end up there.
2. **How do I log in?**
   The first time you log in the information required is the following:
   User ID: Tnumber (A "T" is at the start, no space between the T and the number.)
   Password: Your Last Name (Capitalize first letter of last name.)
   When your first log in, you will be able to change the password. Forgetting revised passwords is a common reason why students cannot log on to their account. Use the "**Forget Password**?" function in Sona to reset your password.
3. **When are credits due?**
   Credit due dates are set by each professor. However, many studies listed on Sona do not collect data the last week of regular classes, and no studies run during final exam week.
4. **How do I know if it is an in-person or online study?**
   Most studies designate this in the description. Online studies usually say, "(Online Study)". Online studies will have a link that will allow the student to complete the study immediately after you sign-up for a "timeslot". In-person studies have many timeslots with locations for which you can sign up.
5. **How long does it take to get my credit?**
   The researcher has to assign you credits. The time depends on how long it takes the researcher to give you credit. We encourage researchers to assign credits in a timely fashion (within a few days after you do the study).
6. **Who do I contact if I have questions about my credit for a particular study?**
   Please contact the researcher running the study if you have a question about credits for that particular study. You should be able to get their contact information in Sona.
7. **Who do I contact if I need to cancel or reschedule a study?**
   Many times you can cancel the study on the Sona website. Otherwise, you should contact the researcher directly in-charge of running the study. Their contact information may be in the study information on the Sona website. If not, try to contact them through Sona itself.
8. **Where are the in-person studies located?**
   Locations vary. Please pay attention to the location of the study when you sign up for the study in Sona.
9. **What if this FAQ failed me? I still don't know the answer to my question!!**
   If you have question or need additional help, please contact the Sona student worker (whose email address is at the bottom of the Sona webpage http://suuresearch.sona-systems.com/), or Professor Bryan Koenig (bryankoenig@suu.edu).

Part B: Guide for Student Researchers (Conducting Research Studies)

1. Introduction

Psychology is a science. Learning about that as a participant is valuable, but actually conducting research is the best way to learn the value of research. Students conduct research in various capacities:

- a student in a class as a learning experience
- a student in a research class as a research project
- as an independent researcher (with a faculty mentor)
- as a volunteer researcher (helping a faculty researcher)

Students in different roles have different responsibilities. This handbook will not tell you what you must do. This handbook will instead help you to do some research activities that are commonly done in psychology. Ask your instructor or mentor to find out what you have to do for your specific research project.

2. Common Steps in the Research Process for Student Researchers

Your instructor/faculty mentor will advise you through this process. Research occurs in many ways, so you might not do all of these steps, and you might do other ones. This is just a simplified series of events to provide a sense of what occurs during student research.

#	Research Activity	APA Paper
1	Learn some of the published literature (read articles)	Introduction
2	Develop a research question/hypothesis	Introduction
3	Design a study that can address the research question/hypothesis	Method
4	Request a Sona account by emailing the Sona student administrator (see here).	Not in paper
5	Develop the materials for the study. For example, put study info and recruitment text in Sona, consent form and questionnaires on Qualtrics.	Method
6	Complete CITI training (see here)	Not in paper
7	Complete and then submit IRB application materials (IRB application form, consent form, recruitment text, questionnaires, CITI certificates for all researchers; see here)	Not in paper
8	Wait for IRB review. Make all IRB-required modifications. Submit modified documents to IRB. Receive from IRB verification that all modifications are satisfactory. IRB says okay to collect data.	Not in paper
9	Start collecting data. Give research credit often.	Not in paper
10	Download data from Qualtrics.	Not in paper
11	Restructure and clean data. Analyze data. (see here for software)	Results

12	Make sense of results	Results, Discussion
13	Disseminate findings (for example, submit APA style paper to instructor, present in class or at Festival of Excellence or the Rocky Mountain Psychological Association conference; see here and here)	Not in paper

3. Student Researcher Responsibilities

The Psychology Department's Research Participant Pool benefits participants and investigators alike. Participants have the responsibility to show up on time, take the experiment seriously, and give honest responses. As the investigator, you have responsibilities too. Please adhere to the policies and procedures below. This will help make the experience rewarding for everyone. If your faculty supervisor/mentor/instructor requires it, you may need to sign the form at the end of this document (Appendix A) to commit formally to these responsibilities.

- **Scheduling Time Slots** - Before you schedule time slots for in-person research, you must reserve the testing room in Skedda (unless you have a room available another way). Enter time slots very carefully. It's easy to make a mistake. Timeslots are needed for online studies in order for participants to sign up for your study.
- **Canceling Time Slots** - You may cancel time slots if necessary. However, canceling a time slot that is already booked is highly discouraged and should only be done under exceptional circumstances. If you need to cancel a timeslot, be sure to log in to Skedda and cancel the room reservation so that others can use it, and to cancel that timeslot in Sona.
- **Participant No-Shows** - If a participant fails to show up, you must record this. Be sure to note the date and time of the appointment. See "Crediting Participation" below for more details.
- **Investigator No-Shows** - You are required to be at the location at the time that Sona says the study will take place. The only thing worse than the participant not showing up is you not showing up. If you don't show up but the participant does, you should give them all research credits for your study as if they completed it.
- **Testing Participants not Scheduled Through Sona** - If you have IRB approval for it, you are encouraged to invite would-be participants from the hallways when you have unscheduled time slots. However, you must ask them first if they are a PSY 1010 student doing this for course credit. If they say yes – STOP! Have them run to the nearest computer and sign up through Sona. This is necessary in order to grant them research credit. If they say no, proceed with the study with your new participant.
- **Crediting Participation** - It is your responsibility to grant credit to each Sona participant who showed up. As relevant, you must also indicate whether the participant was an unexcused no-show or an excused no-show (ask your instructor or faculty mentor if you are unsure what to do for no-shows). This must be done in a timely fashion (1-2 days, ideally).

- **Confidentiality** - You will have access to participants' names and emails. This is protected information and must not be shared with anyone other than the research team, the PSY 1010 course instructor, and the Sona administrators. You must NOT use the participants' email for any reason unrelated to their participation in this particular research project. Any violation to this policy may result in disciplinary action at the department, college, and/or university level.
- **Miscellaneous** - Should any problems or questions arise, please contact your course instructor or research supervisor ASAP. Waiting tends to make a small problem worse.

4. Research Ethics Training (CITI certification)

https://www.citiprogram.org/index.cfm?pageID=14

Due to unethical research in the past, global organizations, the US government, and Southern Utah University have established requirements for training in research ethics. SUU uses the "CITI" training courses. You should complete your training and then download onto your computer the certificate that says that you finished your training (it will include your name, the date, and the type of training you finished). CITI certificates are submitted with the IRB application.

To complete CITI training, here are the steps you need to take:

1. Go to this URL: https://www.citiprogram.org/index.cfm?pageID=14
2. Select "REGISTER" on the right.
3. Page 1: Select "Southern Utah University" as your Organization Affiliation.
4. Page 2: Provide your name, email, and alternate email address.
5. Page 3: Create a username and password and security questions.
6. Page 4: Indicate your current country of residence.
7. Page 5: You are not required to earn Continuing Education Units (CEU). Select "No".
8. Page 6: Provide information about your role in research at SUU (for most readers of this document, your role is probably, "Student Researcher - Undergraduate").
9. Page 7: To select the correct curriculum, for Question 1, most readers should select "Student Researchers".
10. Page 7: Question 2: You do not need to select the Good Clinical Practice (GCP) option. Leave this item blank.
11. Page 7: Question 3: You do not need to include the Responsible Conduct of Research. Select "no at this time, thank you."
12. Page 7: Question 4: You do not need to respond to Question 4 (Laboratory Animal Welfare).
13. Complete training. Download the certificate to your computer.
14. When you have successfully completed the CITI course, email your CITI certificate to your instructor or faculty mentor (that is, follow the instructions of your instructor or faculty mentor).

5. Preregistering Your Research (as part of open science)

Open Science Framework (OSF)

https://osf.io/

This is a website that was produced by a group of psychologists called the Center for Open Science. The website provides various services for researchers. In particular, researchers can (a) preregister studies by locking in their research plan and statistical analysis before collecting data so later others can see how much the researchers stuck with their plan, (b) make research materials available for other researchers to help them do direct replications, (c) share data with other researchers so they can reanalyze it, and (d) write project notes that can be shared with the research team or the public. You should check with your instructor or faculty supervisor to determine if you should preregister your research.

6. Qualtrics (online survey platform)

https://suuhss.co1.qualtrics.com/

Qualtrics is an online platform (website) for running studies over the internet. Researchers create a study in Qualtrics. Then participants receive a link elsewhere (e.g., on Sona or an MTurk advertisement or mySUU Student Portal) that brings them to the Qualtrics study webpage. Participants then read an informed consent, and if they consent (by clicking on an appropriate button, usually) then they go through the pages of the study. Qualtrics is designed for research, so it has ways to do random assignment and so on.

How to create anonymous surveys but still know who did your study:

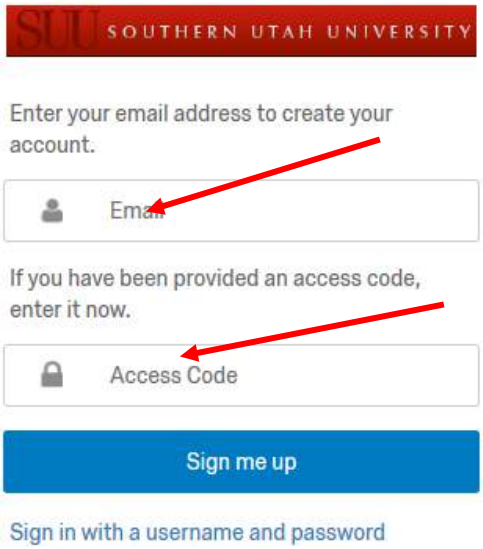
Sometimes researchers need to know their participants' identity, but do not want to be able to connect participants' identity with participants' data. For example, a study might ask about drug use, which is an illegal activity and so anonymous data would keep participants safest, but the researcher still needs to give research credit to participants in Sona. A solution here is to create two Qualtrics studies. The first starts with consent, then asks all the questions, and ends with a link to the second (separate) Qualtrics study. When participants click on that link, they are brought to the separate study, which asks for identifying information that can be used to provide research credit, for example. By having two separate Qualtrics studies, you are keeping their survey answers and identity in two separate databases. If you do this approach, it would be unethical to try to connect identity information with survey responses. You might want to look for YouTube vides on how to do this.

Overview of steps make an anonymous survey in Qualtrics and know who your participants are:

1. Create the first survey for data collection for your study.
2. Create a second survey that asks for the participants first and last name.
3. Go to the first survey, select "Survey Flow"
4. Scroll to the end of the survey and select "Customize"
5. Select "Redirect" and insert the URL for the second survey.
6. Click "Ok", then click "Apply"

To create a Qualtrics user use account:

1. Open this URL https://suuhss.co1.qualtrics.com or copy and paste it into your web browser.
2. Select "Don't have an account?" (see screen shot below left).
3. Enter your @suu.edu or @suumail.net email address. For full account features, you MUST use an @suu.edu or @suumail.net email address.
4. Enter the Access Code: **see your faculty supervisor** (see screen shot below right)
5. Follow instructions on screen (e.g., the email verification)
6. Remember this is only to be used by SUU Faculty and students in the College of Humanities and Social Sciences.



7. SUU's Institutional Review Board (IRB)

IRB

https://www.suu.edu/academics/provost/sparc/irb/

Human-subjects research must be approved by the IRB. Some projects don't count, officially, as human-subjects research. If you are unsure, ask your instructor or faculty mentor. For research that needs IRB approval, you should work with your instructor or faculty mentor to prepare an application for submitting to the SUU IRB. It should include the following:

1. The application document itself (there are two versions: exempt and regular; if you are unsure, use regular). You can find these applications on the SUU IRB webpage.
2. CITI training ethics certificates for each person involved in the research.
3. The informed consent document you will give to your participants. See the SUU IRB webpage for further guidance.
4. A copy of all research materials, such recruitment text, surveys, and pictures. For online studies, the best thing to submit is pdfs of your study's webpages.
5. Send all files as attachments. Don't provide links to the cloud, such as google documents.

Ideally, you will finalize everything for your study before submitting your application to the SUU IRB. Your instructor or faculty mentor MUST sign your application before it is submitted.

Usually, instructors or faculty mentors submit IRB applications (that is, you probably won't do it yourself). Applications should be emailed to irb@suu.edu.

8. The Undergraduate Research Pool (Sona)

https://suuresearch.sona-systems.com/

Sona is the online platform (website) that the SUU Psychology Department uses for its research participant pool. Sona is where we recruit SUU students (in designated classes, such as PSY 1010) to participate in our studies and give them credit for participating. Those students who do such studies are the "research pool." This is not used for MTurk participants.

Student Research with Sona, FAQs (Frequently Asked Questions):

1. **When can I run studies in Sona?**
    a. We usually load student participants into Sona around the drop/add day for the semester. Studies can run until the last day of regularly scheduled class for the semester (i.e., before finals week). You should grant credits ASAP after the last day of regularly scheduled class, if you collect data up to that point.
2. **How do student researchers get an account?**
    1. Go to the Sona webpage, or google "SUU Sona" and it should be the first website.
    2. Find the email at the bottom of the page next to "Email questions to"
    3. Email the Sona Student Admin with the following information
        i. your first and last name
        ii. the email you would like to use for all Sona activities
        iii. which professor you will be working with and if it is for a class, please provide the class name
    4. Wait a few work days for your account to be created. If you do not receive your login within a few days, please check your junk mail and then email the student admin again if you still can't find the email with your login.

    Note that the "request an account" button on SONA is for participants only.
3. **How do I log in?**
    You will receive an email from SONA with your login information:
    Username: lastname_researcher
    Password: will be generated by SONA so only you know what it is.
4. **How do I post my study?**
    Click on the "Studies" tab then "Add New Study". Then carefully read all of your options to add the correct type of study to the system. Do not forget to add (a) time slot(s) with a deadline no later than the last regular day of class for the semester (i.e., before finals week).
5. **What if I added my study, but participants can't find/see it?**
    Most likely, you need to add a timeslot. Students can't sign up if no timeslots are available, even if your study is just an online survey. Go to your study and click on "View/Administer Timeslots" then "Add A Timeslot".
6. **How do I run a Qualtrics online study using participants from Sona?**

Sona is set up for having participants do studies on external webpages, like Qualtrics or Surveymonkey. Most of this is simple, but there are a few errors to avoid. First, if your study is in Qualtrics, then you must tell Sona that you are not "using Sona" for the survey (that refers to Sona's own survey functions). Second, even though you are not meeting with participants, you must still create a "timeslot." It is effectively the deadline for when students can do your study. Third, you need to know who your participants are to give them credit after they do the study. The section above on Qualtrics describes one way to do this. Alternatively, Sona provides instructions for how to automate the granting of credit from participants whose data is collected via Qualtrics or other online platforms (see https://www.sona-systems.com/help/)

7. **How do I collect data anonymously on Qualtrics but still be able to give research credit to participants?**

   This issue is addressed in the section above on Qualtrics.

8. **When should I give participants their research credit?**

   As soon as you can, once they complete your study. That is the courteous and professional thing to do. Note that for online studies, you should give credit to participants when they complete your study rather than waiting for the deadline.

   - **How to grant credit to participants**:
     - Go to "view/administer time slots"
     - Click on "modify"
     - If using Qualtrics, check there if they finished the survey
     - If you see their name (or other identifier) in Qualtrics you will click "participated" in Sona next to their name

9. **What if a participant didn't show up?**

   If they have a legitimate reason for not showing up, mark them an "excused". They won't be penalized in that case. Be generous. If they never even tried to contact you, and you showed up for a face-to-face study, it is reasonable to penalize them if you want (in that case, they will lose the number of credits they would have gained from doing your study).

10. **What if I didn't show up for my own study?**

    It happens. You should give all participants credit. You should figure out why it happened and do your best to avoid the same thing happening again in the future.

11. **What if I need to find a room to use to run participants?**

    You should reserve rooms before you post timeslots. You can reserve rooms using "Skedda". See the related section below on this topic.

12. **Any last steps before I post my study live on Sona?**

    Ask your course instructor or faculty mentor if they would like to review your posting on Sona before you "activate study".

9. mySUU Portal

https://my.suu.edu/

You can recruit participants on the mySUU Portal. It is an easy way to reach more students and get a more diverse sample from SUU students. Note that your recruitment announcement will stay up for less than 5 days, but it is a great way to get a lot of participants. You can resubmit if you would like it to go up again.

To put your study recruitment on the student portal:

1. Login to your mySUU Portal.
2. Scroll to the very bottom and click "Submit a portal announcement"
3. Insert the information that you used in your already-approved IRB application.
4. Be careful when you pick the audience. For most projects, you should pick "students."
5. The folks who run the portal have the following requirements:
    a. **Title-** Needs to be concise and specific to the research study
    b. **Description-** Needs to be clear and professional to lend credibility to the research. Please include the following...
        i. State the intent - What the survey hopes to discover or better understand
        ii. Instructions about the survey
        iii. The professor or supervisor overseeing this research

For example:
In this study we hope to better understand xxx

This will be an anonymous survey. Before beginning, please make sure that you have time to complete the survey in its entirety, as we cannot use incomplete surveys. It will take you approximately 15 minutes. Thank you for participating, as we hope that our findings will be able to help with this important issue.

This research is being conducted by or overseen by professor Koenig (include professor title and email)

10. Mechanical Turk (paid participants)

https://requester.mturk.com/

This is Amazon's online crowdsourcing platform on which requesters submit jobs (called HITs) and workers complete them. This is where researchers recruit MTurkers and then pay them for participating, but it is not where researchers collect their data. We do that on Qualtrics (usually). We need to be timely in paying MTurkers (usually pay within 1-2 days). MTurk is a great way to get a lot of participants fast (e.g., 1000 in 24 hours), but it has drawbacks. One is that it costs money (you might be able to get funding through UGRASP). Many MTurkers will click through your study without reading your questions, so you need to know how to implement

effective attention checks. In short, if you want to use MTurk, you should find a good mentor to help you through the process.

11. Reserving Rooms for Research Use (Skedda)

https://suupsychology.skedda.com/booking

If you need to reserve rooms in the General Classrooms Building to run participants, then you need access to the Skedda website, which is what the Psych Department uses for room reservations. To get access to Skedda, email a request for access to the Psychology Department at help308@suu.edu. Some rooms are locked. To access them, talk with the folks at the front desks in the Psychology Office. They will show you how to check out and return keys.

12. Statistical Analysis Software (SPSS and R)

SPSS. Researchers use many computer programs to do their statistical analyses. A common program for SUU Psychology Faculty is SPSS. It has a point-and-click interface and it can write the syntax for the analysis for you. SPSS is already installed on all library and computer lab computers, including the Psychology Computer Lab in the basement of the General Classrooms building, room GC 008. Student researchers can also install SPSS on (most types of) home computers using the following information.

- download the SPSS v28 software here:
  - https://drive.google.com/drive/folders/1Vy80BxPFkChAaO6apBeMUeVEC1MzWtmB
- The license code to activate the software is **see your faculty supervisor**
  - This code is valid through 31 August 2022. It is unique to Southern Utah University.
  - Do not post on public web pages or share with others outside of SUU. Posting this information within a Canvas shell is acceptable since Canvas requires a login to access the information.
  - If this information does not work to provide access, ask your faculty supervisor/mentor/instructor for the updated information.

R Statistical Program. Another popular statistics program is R. It is free and open source, so many employers like employees who can use R. Its creation is distributed amongst users, and you primarily use syntax to run it, so it can be a bit more challenging to learn right away. You can get his free software and a lot of information about it here:

- https://www.r-project.org/

13. Presentation Opportunities

Science is not only a method, it is a community of human beings who share their discoveries and insights with one another. Many opportunities are available for SUU undergraduate researchers to present their research. Below is a list of some of the most common presentation venues utilized by Psychology students. Ask your instructor or research mentor if you are interested in presenting at these.

- **Psychology Department Fall Symposium**

- This is an annual showcase of Psychology Department student research from Research Design courses, Principles of Assessment courses, Independent Research courses, and student volunteer research experiences. This is usually the Wednesday of the last week in regular classes, each fall. Students are typically recruited by their instructor or faculty supervisor for this.

- **SUU Festival of Excellence**
  https://www.suu.edu/excellence/
  - This is an annual showcase of research and other creative products produced by Southern Utah University's students, faculty, and staff. SUU usually sends out emails to recruit presenters. You can find out more on its webpage.
- **Rocky Mountain Psychological Association (RMPA)**
  http://www.rockymountainpsych.com/
  - This is an annual peer-reviewed conference (held in late spring) conducted by the Rocky Mountain Psychological Association, a regional professional society for psychologists. You can join this society and present at the conference. Membership and conference attendance does cost money. You have to submit an application to do your presentation, which will be reviewed for quality. If it is accepted, you get to do your presentation at RMPA. Speak to your course instructor or faculty advisor about funding opportunities for RMPA.
- **Other professional societies**
  - There are many professional societies in psychology. Some are huge, such as the Association for Psychological Science. Others are smaller and devoted to more specific topics, such as the Society for Personality and Social Psychology. Most of these professional societies hold annual conferences. Talk with your instructor or research mentor if this sounds interesting to you.

14. Publication Opportunities

The best way for scientists to share their discoveries and build their professional CVs is to publish articles in peer-reviewed journals. If you are interested in pursuing this route, many options are available to you. You should definitely talk with your instructor or research mentor if you want to pursue a peer-reviewed publication. Rock on!

- Psychology Department Research Journal
- Psi Chi Research Journal
  https://www.psichi.org/page/journal_main
- Professional Journals

Part C: Glossary of Terms

Anonymous

Anonymous means unknown to the researcher. This refers to either anonymous data or anonymous participation (see below). *Anonymous data* refers to when the researcher cannot connect participant data with specific participants. *Anonymous participation* refers to when researchers do not know who participated in their study (that is, the identity of who was in their study). Alternatively, data and/or participation can be *confidential*, in which case the researcher knows which participants provided which data (*confidential data*) or who was in their study (*confidential participation*), but does not share that information outside the research team.

Compare with *confidential*. See the Student Researcher entry for the SUU Institutional Review Board (IRB).

Anonymous Data

Data collected from participants is either anonymous or confidential. *Anonymous data* is information (data) collected from or about human subjects (participants) in such a way that the researcher(s) cannot determine which data goes with which participant. *Confidential data* is collected in such a way that the researcher can connect participant answers with participant identity (they know what each person said).

Researchers are able to collect anonymous data when their data collection materials (such as surveys or interview questions) do not ask participants identifying information. *Identifying information* includes their name, email address, social security number, and so on.

Anonymous data is generally preferable to confidential data when surveys ask embarrassing questions or include any data that people would want to be kept private. Often, researchers need to know the identity of participants (e.g., to give them research credit in Sona), but want anonymous data. For in-person research, this can be done by keeping the Informed Consent Form separate from the surveys or other research materials. For online research, you can have anonymous data collected with one Qualtrics survey, and at its end have a link to a separate Qualtrics survey that asks for identifying information. For instructions on how to do this, see the Qualtrics entry above.

Compare with *confidential data* and *anonymous participation*. See the Student Researcher entry for the SUU Institutional Review Board (IRB).

Anonymous Participation

Participation in a study can be either anonymous or confidential. *Anonymous participation* is when the researchers cannot identify who was in their study (that is, researchers do not know the identity of their participants). *Confidential participation* is when the researchers know who was in their study, but don't tell anyone outside the research team. If a study has anonymous participation, it always has anonymous data.

Anonymous participation is preferred to confidential participation for studies that recruit participants who have embarrassing characteristics or have had embarrassing experiences. For example, if a researcher did a study that only included participants who have had sexually transmitted diseases, then knowing that someone was in the study also indicates that person has had a sexually transmitted disease. Anonymous participation requires that the consent form has no signature or printed writing of the participants' names, and that the research questions do not ask for identifying information, such as names, social security number, email address, and so on. Such a situation is common for online studies with non-student participants, like workers on Mechanical Turk.

Compare with *confidential participation* and *anonymous data*. See the Student Researcher entry for the SUU Institutional Review Board (IRB).

Benefits

In the research context, *benefits* refers to expected improvements (a) in the lives of participants because they did the study, (b) in scientific understanding of the study topic, or (c) the world generally. *Benefits* also refers to the section of the Informed Consent Form that describes the benefits. If the researcher is compensating participants—such as with research credits or money—the compensation can be described with the benefits.

Most studies have no benefits for participants other than learning about science by participating in a study. However, if a study looks at psychological, biomedical, or other therapies, for example, or skills training, then participants might benefit directly by being in the study. Most studies improve scientific understanding of a topic, and many provide useful information for laypersons. The benefits section of an informed consent form should work through these topics *as it relates to the study itself*.

Compare with *compensation* and *risks*. See the Student Researcher entry for the SUU Institutional Review Board (IRB).

CITI Training

CITI training refers to research ethics training that must be completed by all people engaged in the research process. CITI is an acronym for Collaborative Institutional Training Initiative. The SUU IRB uses customized CITI courses to ensure researchers have research ethics training. CITI certification is good for 3 years, after which the researcher must recertify.

CITI courses are completed on the CITI webpage. The courses are made up of modules, each of which focuses on a different topic. Researchers have to pass a quiz at the end of each module. CITI training has courses customized for different research roles, including Student Researchers, Faculty/Staff Researchers, and IRB members. Undergraduate researchers should complete the Student Researchers course. Their faculty mentor is a faculty member, so they have to complete the Faculty/Staff Researchers course. The Student Researchers course is 2 modules and takes most people about 1 hour. The Faculty/Staff Researchers course has 7 required modules that take most people 2-3 hours.

Researchers should complete CITI training on the CITI webpage, then download a pdf of the CITI Certificate to their computer. Researchers have to submit the CITI training certificate to the SUU IRB along with their IRB application. Note that when you complete CITI training, you are also given another report that indicates which modules you completed and your scores on the related quizzes that CITI gave you. The IRB does not need that report, although you might want to download it in case you need to show another IRB what courses you completed (for example, if you submit an IRB application next year at the University of Utah after you start graduate school there).

See also *IRB Application*. See the Student Researcher entry for the Research Ethics (CITI) Training and the SUU Institutional Review Board (IRB).

Compensation

Compensation is payment researchers provide to participants for doing the study. At SUU, the most common compensation is *research credits*. Research credits are given at a rate of 1 credit for a study that takes up to 30 minutes, 2 credits for a research study that takes between 30 and 60 minutes, and so on. Another common compensation is money. Workers on Mechanical Turk, for example, are paid money for completing a research study.

Compensation also refers to a section of the informed consent form. If there is not much to say about compensation, which is common, then a separate compensation section is not required. In that case, the compensation can be described in the *Benefits* section of the Informed Consent Form.

Compare with *benefits* and *risks*. See also *IRB Application*. See the Student Researcher entry for the Undergraduate Research Pool (Sona) and the SUU Institutional Review Board (IRB).

Confidential

In the research context, *confidential* means that something is known to the researcher, but the researcher does not tell anyone outside the research team. That is, the researcher keeps the information secret. Participants' data and identity can be either confidential or anonymous. That is, participant identity is either *anonymous participation* if the researcher does not know who did their study, or *confidential participation* if the researcher does know who was in their study but doesn't tell anyone. Participants' data can be either *anonymous data* if the researcher cannot figure out which data goes with which participant (for example, they don't know which participant said what), or *confidential data* if the researcher can tell which participant said what, but the researcher keeps that information secret.

Compare with *anonymous*. See also *confidential data* and *confidential participation*. See the Student Researcher entry for the SUU Institutional Review Board (IRB).

Confidentiality

In the research context, *confidentiality* refers to the general topic of how much about participants can be determined by the researcher and others. Confidentiality is critical for

research ethics because often researchers collect data that would be harmful for a participant if others learned of their data. For example, a participant would look bad if their employer learned that the participant said they disliked their boss.

A central issue for confidentiality is whether data is anonymous or confidential. Another central issue is whether participation is anonymous or confidential.

Confidentiality types for all research projects (IRBs care a lot about this.)

Type	Meaning
Anonymous data	Researchers cannot connect research data to specific participants.
Anonymous participation	Researchers do not know who is in their study.
Confidential data	Researchers can connect research data with specific participants, but do not share that information outside the research team (except perhaps instructors or the IRB).
Confidential participation	Researchers can figure out who was in their study.

Possible combinations of anonymity and confidentiality, for participation and data		Researcher able to connect data to specific participants?	
		No (*Anonymous data*)	Yes (*Confidential data*)
Researcher knows who is in their study?	No (*Anonymous participation*)	Possible	Impossible
	Yes (*Confidential participation*)	Possible	Possible

Some research methods have special implications for confidentiality. For example, video or audio recordings of participants can be a touchy subject.

Confidentiality also refers to a section on an Informed Consent Form. That section includes the following. Whether participation is anonymous or confidential. Whether data is anonymous or confidential. Who the researcher will share identifying information (if relevant). This section also addresses other special issues related to the study, such as video or audio recording, redaction of interview transcripts (e.g., deleting names or other identifying information). For video and audio recordings, this section should explain who will have access to the recordings, who will transcribe them (if that will be done), who the recordings will be shared with, how long they will be kept before they are deleted, and who will delete them. The confidentiality section should also indicate if the researcher is obligated to identify a participant to authorities, as might be the case if you ask participants about being an immediate threat to others.

See also *confidential*, *anonymous*, and *Informed Consent Form*. See the Student Researcher entry for the SUU Institutional Review Board (IRB).

Confidential Data

Confidential data is information collected by researchers about participants in such way that the researcher can determine which participant provided which information, but the researcher keeps the information private/secret. That is, the researcher does not share with anyone who provided which data. The only other kind of data is *anonymous data*, which is collected in such a way that the researcher cannot determine which participant provided which data.

If a researcher wants to share data along with participant identity to an audience outside of the research team, then the researcher needs special permission from participants. For example, the researcher could have a special permission form that the participants could sign if they gave the researcher permission to share their data along with their identity.

Researchers can collect *anonymous data* rather than *confidential data* by keeping their questionnaires, etc. separate from any identifying information that they ask participants. For example, if a researcher wants to collect *anonymous data* using Qualtrics, but must be able to identify the participants in order to give them research credits in Sona, the researcher can create two Qualtrics surveys, the first one asking research questions and ending with a link to the second survey, and the second survey asks for identifying information that researchers can use to give the participant research credit in Sona.

See also *confidential*, *anonymous*, *anonymous data*, and *Informed Consent Form*. See the Student Researcher entry for the SUU Institutional Review Board (IRB).

Confidential Participation

Confidential participation refers to when the researcher knows the identity of participants, but does not tell anyone outside the research team. It can also refer to when the researcher can determine the identity of participants using the data collected in the research. Confidential participation is common when researchers give research credits to participants, when participants are entered into a lottery for a prize, or whenever participants sign their name to an informed consent form.

Confidential participation is usually not an ethical concern. It is undesirable when the research recruits only participants with socially stigmatized characteristics, in case the participant identities became known to people outside the research team. For example, if a list was posted online of participants who did a study on sexually transmitted diseases, or experiences in prison, then participants could have negative effects in their lives.

If the research asks embarrassing questions, confidential participation is okay from an ethical perspective but the data should be anonymous. *Anonymous data* is when the researcher cannot connect data (e.g., survey answers) to specific participants.

See also *confidential*, *anonymous*, *anonymous data*, *confidential data*, and *Informed Consent Form*. See the Student Researcher entry for the SUU Institutional Review Board (IRB).

Contact (information on an Informed Consent Form)

All Informed Consent Forms should provide information to participants about who is doing the study, their role, what their credentials are, and how to contact the researcher. If the researcher(s) has a faculty supervisor, the same information should be provided for them. For example, an IRB application might include the following.

Contact Information

Tom Hexley	**Bryan Koenig, PhD**
Primary Investigator	Faculty Supervisor
Undergraduate Student	Assistant Professor of Psychology
hexley@suu.edu	bryankoenig@suu.edu
435-000-0000	435-586-7864

The email address (irb@suu.edu) for the SUU IRB should **always** be provided as well. Perhaps say, "You may email concerns about this research to irb@suu.edu".

See also *Informed Consent Form*. See the Student Researcher entry for the SUU Institutional Review Board (IRB).

Deception

In the research context, *deception* refers to misleading participants about some important aspect of the research, or not telling participants something important. This violates the standard ethics rule that participants should be fully informed before they decide to do the study. Therefore, all research studies that use deception must include in the IRB application a justification of why the deception is necessary for the goals of the research. That is, the researcher must explain to the IRB why the research would not work if the participants were fully informed about the goals of the research.

All research studies that use deception must also include a *debriefing* at the end of the study. In the debriefing, the researchers tell the participants all the truth about the study, and explain why the deception was necessary. Researchers should see if the participants have any questions about the research and answer all questions to the best of their ability.

See also *IRB application*. See the Student Researcher entry for the SUU Institutional Review Board (IRB).

Ethics Training

Anyone engaged in the research process must complete ethics training and submit a copy of their ethics certification to the SUU IRB. Being engaged in research includes being involved in the collection of data and supervising researchers. SUU uses CITI courses for

ethics training. Ethics training is good for three years, after which the researcher has to recertify.

See also *CITI Training* and *IRB Application*. See the Student Researcher entry for Research Ethics (CITI) Training the SUU Institutional Review Board (IRB).

Experiment

A research study in which participants are randomly assigned to different conditions. That is, people in the study have different experiences, and something like a coin flip is used to tell which experience each person will have. For example, a researcher interested in whether caffeine improves math problem solving might flip a coin to randomly assign participants to drink decaffeinated coffee or caffeinated coffee before the participants complete a set of math problems. The other main type of research design is a "correlational study", in which the researcher measures two or more variables to determine which variables correlate. An experiment is usually necessary to make causal claims about a variable causing an effect in an outcome variable. Experiments can be online or in-person.

Informed Consent

Informed consent is more than just a signature on a form. It is a process of information exchange between the investigator and their potential participants. Consent continues until the research is complete, and sometimes beyond that when the researcher wants to re-use or share data. If you meet your participants face-to-face, talk with them about your study. Do your best to answer any of their questions.

A central part of the informed consent process is the Informed Consent Form. It is a written document that explains to participants the main things they would want to know to determine whether or not they want to do a study.

Some topics that have special consideration for informed consent, including the following:

- asking participants about information they would want the researcher to keep private, such as embarrassing characteristics
- deception
- online studies
- participants who are minors/children
- research in which participants eat, drink, or smell something (or are exposed to other chemicals)
- research that has exercise or other physical activities
- reusing data later for a purpose other than the original study goals
- video/audio recording or taking photos of participants
- when it is impossible/unreasonable to get informed consent
- when researchers want to screen people to select only some as participants
- when the focus of the study is an embarrassing topic
- and other unexpected things not on this list ☺

See also *Informed Consent Form*. See the Student Researcher entry for the SUU Institutional Review Board (IRB).

Informed Consent Form

Informed Consent Forms are documents used to tell potential participants about a study so that they can decide if they want to do the study or not. All Informed Consent Forms should address the following content: Key Information, Procedures, Risks, Benefits, Confidentiality, Contact (information), the Research is always Voluntary, Signature location (with a place for printed name) and include the email address (irb@suu.edu) for the SUU IRB. Perhaps say, "You may email concerns about this research to irb@suu.edu".'

Think about how a potential participant would read your consent form. What would you want to know if you were thinking about participating in the study? Keep your language simple. Ideally, an 8th grader could understand your consent form. You can check the reading level of your consent form in MS Word. To learn how to do so, google "MS Word Flesch-Kincaid instructions". Pictures, diagrams, and other visual aids are great on consent forms. Exclude jargon (technical terms), or even better include them and define them (perhaps in parentheses :-). Carefully re-read your consent form to make sure it is consistent, accurate, and as short and simple as possible.

No exculpatory language is allowed. That is, you cannot say (a) participants are giving up any rights, or (b) the researcher, sponsor, institution, school, or its agents are not responsible or liable for any bad effects of their research.

As a general rule, you should assume that all adults and children 7 and older are able to provide documented (signed) consent. Note that even younger children provide consent. For example, after you provide a simple description of what they will do, a child can agree to do it. Then, if the child seems like they want to stop, they no longer consent. You must stop their participation right away. If a baby starts crying, they are done with the study.

The principal investigator(s) is responsible even when they have other people obtain informed consent. If the principal investigator(s) are graduate or undergraduate students, then their faculty supervisor(s) is responsible.

If your research has special issues, you can request waivers that allow exceptions to the general rules that IRBs apply, including for consent. To request a waiver, tell the IRB what you want to do and justify your request with strong reasons and/or evidence.

For in-person research, researchers should bring one copy for participants to sign and give back to the researcher, and another copy for participants to keep. For online research, the study landing page is usually the informed consent form. For online studies, instead of a signature, participants usually provide consent either by typing their name into a textbox or by following instructions such as, "Click the continue button if you choose to do this study."

See also *Informed Consent* and *IRB Application*. See the Student Researcher entry for the SUU Institutional Review Board (IRB).

In-person Study

An *in-person study* is conducted with the researcher and participant in the same space. Usually, the researcher reserves a room, schedules a session with the participant, the participant shows up, and the participant does the study. Sometimes the researcher will go to wherever the participant is located, such as a classroom, business, or building (e.g., library). For in-person studies, researchers should provide participants with paper copies of the Informed Consent Form for them to keep, and have participants sign and return another copy of the Informed Consent Form (unless the IRB approved an exception). Before the participants consents, the researcher should ask participants if they have any questions and answer all questions to the best of their ability before the participant signs the consent form.

Students should be able to tell in Sona if a study is online or in-person. In Sona, online studies are marked as "Online" (even though they have a "timeslot", which really is the deadline for when people can do the study). In-person studies, by contrast, have specific times and locations that people must sign up for in order to do the study.

Compare with *online study*. See also *Informed Consent*, *Informed Consent Form*, and *Sona*. See the Student Researcher entry for Sona.

Institutional Review Board (IRB)

The SUU Institutional Review Board is a university-level committee who reviews proposed human subjects research. It is made up of a chair, a vice chair, a teacher education reviewer, and representatives from SPARC (the grants office) and each college at SUU. Most research applications are reviewed by the chair, some are reviewed by the vice chair and teacher education reviewer, and only full board reviews are seen by the full board.

The SUU IRB has a webpage: https://www.suu.edu/academics/provost/sparc/irb/

See also *IRB application*. See the Student Researcher entry for the SUU Institutional Review Board (IRB).

IRB

IRB is an acronym for Institutional Review Board.

See *Institutional Review Board*. See the Student Researcher entry for the SUU Institutional Review Board (IRB).

IRB Application

Human-subjects research must be approved by the IRB. Some projects don't count, officially, as human-subjects research. If you are unsure, ask your instructor or faculty mentor. For research that needs IRB approval, you should work with your instructor or faculty mentor to prepare an application for submitting to the SUU IRB.

IRB applications should include the following:

1. The application document itself (there are two versions: exempt and regular; if you are unsure, use regular). You can find these applications on the SUU IRB webpage.

2. CITI training ethics certificates for each person involved in the research.
3. The informed consent document you will give to your participants. See the SUU IRB webpage for further guidance.
4. A copy of all research materials, such as recruitment text, surveys, or pictures. For online studies, the best thing to submit is pdfs of your study's webpages.
5. Send all files as attachments. Don't provide links to the cloud, such as google documents.

Ideally, you will finalize everything for your study before submitting your application to the SUU IRB. Your instructor or faculty mentor MUST sign your application before it is submitted. Usually, instructors or faculty mentors submit IRB applications (that is, you probably won't do it yourself). Applications should be emailed to irb@suu.edu.

See also *Institutional Review Board*, *CITI training*, *Informed Consent*, and *Informed Consent Form*. See the Student Researcher entry for the SUU Institutional Review Board (IRB).

Key Information (Informed Consent)

This is a concise and focused summary of the most useful information about your research project. Include information that is likely to help people understand if they want to participate in your study. Make this information easy to understand. This section is required for all research submissions starting Fall 2020.

a. It should be near the start of your consent form.
b. This short paragraph should summarize these ideas:
    i. It is a research study.
    ii. Why the research is valuable. That is, why you are doing it.
    iii. What participants will do.
    iv. Expected risks, costs, benefits, and/or compensation for participants.
    v. How long the study will take participants.
    vi. Participation is voluntary.
c. You do not need to repeat the same information later.
    i. A very short consent form can be made up of the key information only. If more details are not needed later, you can exclude those sections.
    ii. However, if you need to provide more details on a topic, include additional sections, such as those that follow. Note that all of the following topics need to be addressed on your consent form in the Key Information and/or their own sections.

See also *Informed Consent Form*, *Institutional Review Board*, and *IRB Application*. See the Student Researcher entry for the SUU Institutional Review Board (IRB).

Mechanical Turk

Mechanical Turk refers to an online marketplace hosted by Amazon. On it, "requesters" post advertisements for paid jobs that can be completed online by "workers." Mechanical Turk is also called "MTurk" and workers are often called "Turkers" or "workers on Mturk". Many requesters are businesses getting feedback about advertisements and so on. Many psychologists and other social scientists collect data over MTurk because doing so

allows researchers to get relatively large sample sizes in a short amount of time, such as 1000 participants in 24 hours.

However, MTurk has some concerns. One is that MTurkers are generally underpaid, even by most psychologists. For example, according to one webpage, MTurkers were paid an average of $2/hour, which is well below the minimum wage and could reasonably be described as exploitative. Another concern is that workers on MTurk generally try to complete as many tasks as possible in as short amount of time, which is unsurprising given their pay rate. A result is that many workers rush through surveys and don't actually answer the questions, resulting in worthless data. Therefore, researchers have developed ways to check to see if MTurk participants are actually reading their questions. For example, a researcher might include an "attention check" question in the middle of a survey that asks participants to choose a response option they would not otherwise select in order to prove they are paying attention.

To use MTurk, a researcher usually designs their study conceptually, gets funding (e.g., UGRASP grant), develops their research materials (e.g., Qualtrics survey), sets up their MTurk webpage, gets IRB approval, pays Amazon in advance, opens the survey to workers, waits until all the jobs are done, verifies which workers actually did the research, then within 3 days or so pays those who did complete the research. If you want to use MTurk, you should find a good mentor to help you through the process.

See also *online study*. See the Student Researcher entry for Mechanical Turk.

Minimal Risk

In the context of research ethics, *minimal risk* has a very specific meaning. It refers to a study having no more risk than a potential participant experiences in the course of their daily life. Note that different kinds of people face different amounts of risk (compare an 87-year-old woman with a 21-year-old soldier). Minimal risk is specific to the kinds of people included in the research (the "population" from which the researcher is recruiting their sample).

The IRB evaluates the research described in every IRB application to categorize the research as greater than minimal risk, or not. If research is greater than minimal risk, then the research proposal must be evaluated by the full IRB during a convened meeting. IRB meetings occur about once per month during the school year, so such applications usually take longer to review. Most IRB proposals for research determined to be no greater than minimal risk can be evaluated by the IRB chair, IRB vice chair, or the IRB education reviewer, which usually occurs sooner.

See also *Institutional Review Board* and *IRB Application*. See the Student Researcher entry for the SUU Institutional Review Board (IRB).

MTurk

MTurk is a shorthand for Mechanical Turk.

See *Mechanical Turk*. See the Student Researcher entry for Mechanical Turk.

Online Study

Most research studies can be categorized as an online study or an in-person study. An online study entails no in-person component. Participants complete the study over a webpage (e.g., Qualtrics). Participants complete the study in any location they choose, and on any device and internet browser they choose (e.g., computer, smart phone, iPad).

Some studies have an in-person component and a component that is done on the computer (either in a location determined by the researcher or wherever the participant happens to be). Such research is usually considered in-person. That is, any research with an in-person component is considered in-person, regardless of whether there is an online component. Research in which participants come to a location determined by the researcher—such as a computer lab—and do the study on a computer would also be considered in-person.

Students should be able to tell in Sona if a study is online or in-person. In Sona, online studies are marked as "Online" (even though they have a "timeslot", which really is the deadline for when people can do the study). In-person studies, by contrast, have specific times and locations that people must sign up for in order to do the study.

Compare with *In-person Study*. See also *Qualtrics*, *Informed Consent*, *Informed Consent Form*, and *Sona*. See the Student Researcher entry for Sona and Qualtrics.

Open Science

Open Science refers to practices that scientists do to make their research more understandable and accessible to others. Open science is most often achieved by scientists posting the related materials onto an open science clearinghouse webpage that is devoted to this purpose, such as the Open Science Framework (https://osf.io/). Another approach to open science is to include related materials in online supplements along with published articles.

Open data is when scientists make their data publicly available. This improves science by allowing other researchers to reanalyze the data to see if their statistical analyses support the same conclusions as made by the original researchers. Open data also enables other researchers to collect datasets across many studies on the same topic and combine that data into a single, larger analysis.

Open methods refers to making your research materials publicly available. Such materials include survey questions, stimuli presented to participants (e.g., photographs, priming words), as well as Informed Consent Forms. Providing these materials benefits science by helping others understand exactly what happened in the research. It also makes it easier for other researchers to conduct direct replications (i.e., repeat the study as close to the original as possible) to see if the original results are robust, or a statistical fluke (i.e.., a false positive finding resulting from random sampling).

Preregistration is when scientists publicly explain (and commit to) their hypotheses, methods, and strategy to analyze their data *before* they collect their data. This improves

science by preventing researchers from questionable research practices, such as HARKing, *p* hacking, and selective reporting of methods and results. Such questionable research practices have been standard practice in many sciences before the "replication crisis" discovery that many published research findings are difficult to successfully replicate.

HARKing—an acronym for Hypothesizing After Results are Known—refers to when research articles include hypotheses that fit the observed findings in the data rather than the hypotheses researchers expected the data to support. HARKing is problematic because unexpected findings are more likely to be false, and the reader is led to believe the findings were expected when they were not. One reason unexpected findings are more likely to be false is *p hacking*, the practice of analyzing data in multiple ways until results are obtained that meet standard publication requirements (which traditionally has simply be $p < .05$). *p* hacking is problematic because applying multiple analyses to one dataset increases the chances of false positive findings (thinking the results say something interesting when really the result was just chance/sampling error). Selective reporting of results is problematic because it suggests that the presented analyses were the only ones conducted, rather than a subset of a larger set of analyses, thereby implying that they were not the product of *p* hacking. Before the replication crisis, research articles were streamlined to only mention supported hypotheses (HARKing was expected), statistically significant results (null findings were almost unpublishable), and methods related to the significant results.

See also *Open Science Framework*. See the Student Researcher entry for Preregistration.

Open Science Framework

The *Open Science Framework* is a webpage devoted to open science that was created by and is run by the non-profit Center for Open Science. Its url is https://osf.io/

See *Open Science*. See the Student Researcher entry for Preregistration.

Preregistration

Preregistration is when scientists publicly explain (and commit to) their hypotheses, methods, and strategy to analyze their data *before* they collect their data. This improves science by preventing researchers from questionable research practices, such as HARKing, *p* hacking, and selective reporting of methods and results. Such questionable research practices have been standard practice in many sciences before the "replication crisis" discovery that many published research findings are difficult to successfully replicate. Preregistration is usually done on a webpage designed for it, such as the Open Science Framework.

See *Open Science*. See the Student Researcher entry for Preregistration.

Procedures

In the research ethics context, *Procedures* refers to the research activities that your participants will experience. Examples of activities include completing surveys online,

consuming energy drinks, and watching videos. All Informed Consent Forms include a Procedures section that describes the procedures in the study.

See *Informed Consent Form*. See the Student Researcher entry for the SUU Institutional Review Board (IRB).

Qualtrics

Qualtrics is an online platform (website) that allows researchers to design and run studies. Most but not all Qualtrics studies are questionnaires. Qualtrics is designed for research, so it has many related features. For example, researchers can have questions presented in a different random order for each participant, and/or it could present different participants with different pictures. Researchers direct participants to their Qualtrics study using a link specific to that study. SUU pays for a subscription to Qualtrics, allowing SUU faculty and students to use it. Instructions for how to create a Qualtrics account is available up in the Qualtrics section above. Instructions for how to make a survey (or other kind of study) in Qualtrics is beyond the scope of this document, but many tutorials can be found online (e.g., on YouTube). Other similar products include SurveyMonkey and Google Forms.

See also *Online Study* and *In-person Study*. See the Student Researcher entry for Qualtrics.

R (statistical program)

R is a free, open-source statistical program. Historically, it has required researchers to use syntax code to run analyses, although some point-and-click interfaces have been developed. Still, it is generally more difficult to learn how to use than some other statistical programs, such as SPSS. Employers often prefer applicants who can use *R* because they do not need to pay for a license for the employee to do statistical analyses, as they would for SPSS and most other statistics programs. One way to get started with *R* is https://www.r-project.org/.

Compare with *SPSS*. See the Student Researcher entry for Statistical Analysis Software.

Research Credit

Research Credits refers to experiences that students have in order to meet course requirements. One research credits is earned for doing a study that generally takes up to 30 minutes of research, two research credits are earned for doing a study that generally takes between 30 and 60 minutes, and so on.

Most General Psychology courses require students to participate in research, and some sections of other courses also have this requirement. The standard Psychology Department recommendation for General Psychology courses is that each student completes 6 credits, 3 earned from in-person studies and 3 earned in online studies. All courses with research requirements must provide an alternative experience that students can have to earn their research credits, such as reading and summarizing journal articles.

Researchers provide research credits for completed studies in Sona. They are encouraged to do so within a day or two of the participant completing the study. That way students know how many research credits they have. Students should be able to see how many total research credits they have in Sona. They should also be able to tell, for each study they are considering doing, how many credits it is worth and if it is online or in-person. In Sona, online studies are marked as "Online" (even though they have a "timeslot", which really is the deadline for when people can do the study). In-person studies, by contrast, have specific times and locations that people must sign up for in order to do the study.

See also *Research Pool* , *Sona*, and *Confidential Participation*. See Student Researcher entry for the Undergraduate Research Pool (Sona).

Research Pool

The *Research Pool* is all of the students who are taking classes in which students are required to complete research studies (or do an alternative activity). Students in the research pool learn of study opportunities in Sona, which is where researchers advertise such opportunities and provide research credits to students who complete their studies. The research pool is a source of participants for psychology research. Some other sources include Mechanical Turk, people walking across campus or who are in specific locations (e.g., the library), students in classes, and social media platforms (e.g., Facebook).

See also *Sona* and *Research Credit*. Compare with *Mechanical Turk.* See the Student Researcher entry for Research Pool (Sona).

Risks

In the research ethics context, *risks* are potential harm that participants could experience as part of doing a research study. For example, a study that asks participants if they have ever considered suicide has a risk of causing emotional stress. *Risks* also refers to a section on the Informed Consent Form. The Risks section describes in simple words what risks participants face by doing the study. The Risks section explains how the researchers have minimized risks, if relevant.

See also *Minimal Risk*, *IRB Application*, and *Informed Consent Form*. See the Student Researcher entry for the SUU Institutional Review Board (IRB).

Skedda

Skedda is a scheduling webpage that the SUU Psychology Department uses for room reservations in the General Classroom (GC) building. Researchers can use it to reserve rooms that they want to use to run participants (i.e., have participants do the study) for in-person studies. Researchers should reserve rooms in Skedda before they post studies using those rooms in Sona. To get access to Skedda, email a request for access to the Psychology Department at help308@suu.edu. Some rooms are locked. To access them, talk with the folks at the front desks in the Psychology Office. They will show you how to check out and return keys.

https://suupsychology.skedda.com/booking

See also *Sona*. See the Student Researcher entry for Skedda.

Sona

Sona is the online platform (website) that the SUU Psychology Department uses for its research participant pool. This is where we recruit SUU students (in designated classes, such as PSY 1010) to participate in our studies and give them credit for participating. This is not used for MTurk participants.

https://suuresearch.sona-systems.com/

Note that there are separate Sona sections above for student participants and researchers. See the section above relevant for you on *Sona* for useful tips.

See also *Research Pool* and *Research Credit*. See the Student Participant entry for Sona, or the Student Researcher entry for Sona.

SPSS

SPSS is statistical analysis software. IBM SPSS Statistics is the formal name of the software. SPSS is an acronym for Statistical Package for the Social Sciences. It is owned by IBM. SUU leases access to it. It is a common program used by students, researchers, and businesses worldwide. It is able to do many basic and advanced analyses, although for some advanced statistical analyses other programs work better. SUU faculty and students can access SPSS, and even download it onto their home computers. If you want access to SPSS, see the instructions above, or contact your instructor or faculty supervisor.

Compare with *R* (statistical package). See the Student Researcher entry for Statistical Analysis Software.

Appendix A

RESEARCH PARTICIPANT POOL

POLICIES & PROCEDURES FOR SUU STUDENTS TESTING PARTICIPANTS IN PERSON

The Psychology Department's Research Participant Pool benefits participants and investigators alike. Participants have the responsibility to show up on time, take the experiment seriously, and give honest responses. As the investigator, you have responsibilities too. Please adhere to the policies and procedures below. This will help make the experience rewarding for everyone.

Scheduling Time Slots

Before you schedule time slots, you must reserve the testing room. Enter time slots *very carefully*. It's easy to make a mistake.

Canceling Time Slots

You may cancel time slots if necessary. However, canceling a time slot that is already booked is highly discouraged and should only be done under exceptional circumstances. If you need to cancel a timeslot, be sure to log in to Skedda and cancel the room reservation so that others can use it.

Participant No-Shows

If a participant fails to show up, you must record this. Be sure to note the date and time of the appointment.

Investigator No-Shows

You are required to test at the time and place specified on the portal. The only thing worse than the participant not showing up is you not showing up.

Testing Participants not scheduled through the Portal

If IRB permits, you are encouraged to invite would-be participants from the hallways when you have unscheduled time slots. However, you must ask them first if they are a PSY 1010 student doing this for course credit. If they say yes – STOP! Have them run to the nearest computer and sign up through the research portal. This is necessary in order to grant them research credit.

Crediting Participation
It is your responsibility to grant credit to each person who showed up. You must also indicate whether the participant was an unexcused no-show or an excused no-show. This must be done in a timely fashion.

Confidentiality
You will have access to participants' names and emails. This is protected information and must not be shared with anyone other than the research team, the PSY 1010 course instructor, and the Sona/research pool administrators. You must NOT use the participants' email for any reason unrelated to their participation in this particular research project. Any violation to this policy may result in disciplinary action at the department, college, and/or university level.

Miscellaneous
Should any problems or questions arise, please contact your course instructor ASAP. Waiting tends to make a small problem worse.

Please provide us with your contact information so that we can email you the links to join Skedda and start making room reservations. Note that by signing below, you agree to the policies and procedures described in this document.

Name (print)	Signature	Date
Email:	Phone:	