Affect-based Impulsivity in Borderline Personality Disorder

NCT number NCT06880640
Document Date 09/30/2026

ROSES S1 - Consent

Start of Block: Default Question Block

University of North Carolina at Chapel Hill
Consent to Participate in a Research Study
Adult Participants

Consent Form Version Date: 09/30/2025
IRB Study # 24-3120
Title of Study: Affect-based impulsivity in borderline personality disorder: developing a neurocomputational phenotype
Principal Investigator: Michael Hallquist
Principal Investigator Department: Psychology and Neuroscience
Principal Investigator Phone number: (814) 863-5756
Principal Investigator Email Address: michael.hallquist@unc.edu
Funding Source and/or Sponsor: UNC-CH

CONCISE SUMMARY The purpose of this research study is to investigate how personality traits and neuroendocrine systems relate to decision-making patterns. This study involves an in-person lab session where you will complete online behavioral tasks, a stress induction procedure, self-report surveys, and a cognitive assessment. During the session, psychophysiological measures will be collected, including electrocardiogram (ECG) and cardiac impedance (ICG) to monitor heart rate and blood flow, as well as electrodermal activity (EDA), blood drop samples, and saliva collection to assess nervous system activity. The session takes approximately 4 hours to complete. The greatest risks in this study are that you experience emotional discomfort associated with completing the stress-inducing task and self-report questionnaires, as well as the risk of breach of confidentiality. It is unlikely that completing this study will directly benefit you. If you are interested in learning more about this study, please continue reading below.

What are some general things you should know about research studies?
You are being asked to take part in a research study. To join the study is voluntary. You may choose not to participate, or you may withdraw your consent to be in the study, for any reason, without penalty.

Research studies are designed to obtain new knowledge. This new information may help people in the future. You may not receive any direct benefit from being in the research study. There also may be risks to being in research studies.

Details about this study are discussed below. It is important that you understand this information

so that you can make an informed choice about being in this research study.

You will be given a copy of this consent form. You should ask the researchers named above, or staff members who may assist them, any questions you have about this study at any time.

What is the purpose of this study?
The purpose of this research study is to investigate how personality traits and neuroendocrine systems relate to decision-making patterns. We hope this research will contribute to the understanding of decision-making, mental health, and the underlying factors that impact these constructs.

Are there any reasons you should not be in this study?
You should not participate in this study if you are younger than 18 or older than 45.

How many people will take part in this study?
Approximately 106 people at UNC-Chapel Hill will take part in this study.

How long will your part in this study last?
If you agree to take part, you will be asked to complete one in-lab study session. The study session will take approximately 4 hours to complete.

What will happen if you take part in the study?
During the session, you will first be asked to complete the informed consent process (including reading this document and having any questions you have answered) and two online behavioral tasks on a computer. You will then complete a controlled stress induction procedure, which includes a public speaking simulation and mental arithmetic. Then, you will play an online game, in which you are tasked with navigating a fictional town and engaging in actions (e.g., buying a book at the bookstore) in order to achieve a goal (e.g., delivering a book to a friend). While completing the stress induction procedure and computer task, your heart rate and nervous system activity will be continuously monitored using an electrocardiogram (ECG), electrodermal activity (EDA) and cardiac impedance (ICG). To measure ECG, ICG, and EDA, disposable sensors will be placed on your fingertips and chest. You will also complete the Social Decision Tree Task, during which we will use a high-resolution video-based eye-tracking technology used to record and measure eye movements. You will then complete a series of online questionnaires and working memory assessment. If you are or were previously enrolled in our lab's other studies, *Neurocomputational Mechanisms of Affiliation and Personality* (IRB: 20-1735), and/or *Neurocomputational studies of mood-related momentum dynamics linking reward learning, valuation and responsivity* (IRB: 21-0602), we may use clinical and questionnaire data from earlier visits regarding your individual traits and behavioral patterns. This will help us understand how these factors are relevant to the aims of the current study and avoid requiring you to complete certain questionnaires again.

Four salivary samples will also be collected during this session: one after you complete a couple brief surveys at the beginning of the session, one immediately after you complete the stress

induction task, one 10 minutes after the stress induction task, and one 20 minutes after the stress induction task. These salivary samples will be collected, stored, then assayed, a process that allows us to measure your cortisol levels, a hormone important for your body's stress response.

A trained researcher will also administer a dried blood spot test after you complete the two online behavioral tasks and one hour after the stress induction procedure. This test involves a finger prick on your dominant hand, ring and middle fingers. The skin will be punctured with a single-use safety lancet, which is the same procedure diabetic individuals use on a daily basis. This may feel like a pinch or be momentarily uncomfortable for some participants, but we expect that it will be a mild experience. These dried blood spots will be collected, stored, then assayed, a process that allows us to measure immunological marker levels.

After measuring the cortisol and immunological marker levels in these, the samples and any identifiers will be destroyed. This research will not include whole genome sequencing. Your participation in this session will take about 4 hours to complete.

What are the possible benefits from being in this study?

Research is designed to benefit society by gaining new knowledge. You will not benefit personally from being in this research study.

What are the possible risks or discomforts involved from being in this study?

We do not anticipate any significant risks from study participation. Nonetheless, here are some possible risks of your participation:

Risks associated with stress induction procedure:

There is a risk of experiencing temporary emotional distress (e.g., anxiety, stress) and physical discomfort (e.g., elevated heart rate). You may stop the session at any time without penalty if you choose to do so.

Risks associated with dried blood spot collection:

For the finger prick, the potential risks to you are those usually associated with the collection of blood; there may be pain or discomfort at the site of collection and there may also be temporary bruising at that site. Very rarely, the site of blood collection may become infected or need

medical treatment. Opting out of the finger prick will not affect your participation in this study; you can decide not to participate in the finger prick and still continue with the rest of the study.

Risks associated with questionnaires:
There is a risk of experiencing emotional distress associated with the questionnaires. You will be asked questions of a personal nature, but you can decline to answer any question if you choose to do so.

Risk of Breach of Confidentiality:
Because we will collect information on personal topics, there is a risk of loss of confidentiality if your information or your identity is obtained by someone other than the investigators. However, precautions will be taken to prevent this from happening. All interview records will be stored in password-protected files on secured servers, or kept under lock and key. Only approved members of the research team will be permitted to access these records. Safeguards to protect against a breach of confidentiality are further described in the section of the consent form entitled, “How will information about you be protected?” The confidentiality of your electronic data created by you or by the researchers will be maintained to the degree permitted by the technology used. Absolute confidentiality cannot be guaranteed. Under special circumstances, researchers may be required to disclose information you provide to individuals outside the research team. Specifically, if you inform us of an imminent risk to the physical safety of you or others (e.g., a concrete suicide plan), or information that researchers are legally required to report to relevant entities (e.g., accounts of child abuse), confidential information may be disclosed to individuals outside the research team.

What are the risks to a pregnancy or to a nursing child?
There are no known study risks to a pregnancy or nursing child.

What if we learn about new findings or information during the study?
You will be given any new information gained during the course of the study that might affect your willingness to continue your participation.

How will information about you be protected?
Rather than associating your data with your name, we will assign you an arbitrary ID number and associate this number with your data. There will be an encrypted, password-protected file that links ID numbers with participant names, to which only approved members of the research team will have access.

All other records from this study will be stored in password-protected digital files or in locked locations (e.g., locked file cabinets in Davie Hall). Only approved members of the research team will have access to these records and to other individually identifiable data (i.e., data that can be associated with you, and not just an ID number). The research team includes the Principal Investigator and members of his laboratory. A small number of other approved individuals with significant roles in the execution of this study will also have access (e.g. collaborating

researchers from other labs).

Participants will not be identified in any report or publication about this study. We may use de-identified data and/or specimens from this study in future research without additional consent.

Although every effort will be made to keep research records private, there may be times when federal or state law requires the disclosure of such records, including personal information. This is very unlikely, but if disclosure is ever required, UNC-Chapel Hill will take steps allowable by law to protect the privacy of personal information. In some cases, your information in this research study could be reviewed by representatives of the University, research sponsors, or government agencies (for example, the FDA) for purposes such as quality control or safety.

Under North Carolina law, confidentiality does not extend to information about abuse or neglect of a child or disabled adult. If the researchers become aware of such information, they are required to report it to state authorities.

What is a Certificate of Confidentiality?

This research is covered by a Certificate of Confidentiality. With this Certificate, the researchers may not disclose or use information, documents or biospecimens that may identify you in any federal, state, or local civil, criminal, administrative, legislative, or other proceedings in the United States, for example, if there is a court subpoena, unless you have consented for this use.

The Certificate cannot be used to refuse a request for information from personnel of a federal or state agency that is sponsoring the study for auditing or evaluation purposes or for information that must be disclosed in order to meet the requirements of the federal Food and Drug Administration (FDA).

The Certificate of Confidentiality will not be used to prevent disclosure as required by federal, state, or local law, such as mandatory reporting requirements for child abuse or neglect, disabled adult abuse or neglect, communicable diseases, injuries caused by suspected criminal violence, cancer diagnosis or benign brain or central nervous system tumors or other mandatory reporting requirement under applicable law. The Certificate of Confidentiality will not be used if disclosure is for other scientific research, as allowed by federal regulations protecting research subjects or for any purpose you have consented to in this informed consent document.

You should understand that a Certificate of Confidentiality does not prevent you from voluntarily releasing information about yourself or your involvement in this research. If an insurer, employer, or other person obtains your written consent to receive research information, then the researchers may not use the Certificate to withhold that information.

What will happen if you are injured by this research?

All research involves a chance that something bad might happen to you. If you are hurt, become sick, or develop a reaction from something that was done as part of this study, the researcher will help you get medical care, but the University of North Carolina at Chapel Hill has not set

aside funds to pay you for any such injuries, illnesses or reactions, or for the related medical care. Any costs for medical expenses will be billed to you or your insurance company. You may be responsible for any co-payments and your insurance may not cover the costs of study related injuries. If you think you have been injured from taking part in this study, call the Principal Investigator at the phone number provided on this consent form. They will let you know what you should do. By signing this form, you do not give up your right to seek payment or other rights if you are harmed as a result of being in this study.

What if you want to stop before your part in the study is complete?

You can withdraw from this study at any time, without penalty. The investigators also have the right to stop your participation at any time. This could be because you have had an unexpected reaction, or have failed to follow instructions, or because the entire study has been stopped. If you withdraw or are withdrawn from this study all data collected up until the point of withdrawal will be retained, however no additional information will be collected unless you provide additional written permission for further data collection at the time of your withdrawal.

Will you receive anything for being in this study?

You will receive $50 or 4.5 SONA credits for taking part in this study, with up to $12 of additional payment depending on your performance in a computer task. If you withdraw from the study prior to completion, you will be paid for the time you devoted to the study. You may also request a voucher for free parking near Davie Hall for each study visit. The biospecimens (i.e., salivary samples and dried blood spots) we collect from you will not be used for commercial profit.

Will it cost you anything to be in this study?

It will not cost you anything to be in this study.

What if you are a UNC student?

You may choose not to be in the study or to stop being in the study before it is over at any time. This will not affect your class standing or grades at UNC-Chapel Hill. You will not be offered or receive any special consideration if you take part in this research

Who is sponsoring this study?

This research is funded by the Department of Psychology and Neuroscience and University of North Carolina-Chapel Hill. This means that the research team is being paid by the sponsor for doing the study. The researchers do not, however, have a direct financial interest with the sponsor or in the final results of the study.

What if you have questions about this study?

You have the right to ask, and have answered, any questions you may have about this research. If you have questions about the study (including payments), complaints, concerns, or if a research-related injury occurs, you should contact the researchers listed on the first page of this form.

What if you have questions about your rights as a research participant?

All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject, or if you would like to obtain information or offer input, you may contact the Institutional Review Board at 919-966-3113 or by email to IRB_subjects@unc.edu.

Permission to Recontact

Please indicate below if you give permission for Dr. Hallquist and/or his study team to re-contact you after this data collection session for future studies with the lab. You are not obligated to take part in these studies. You are simply indicating you would like to be contacted.

- ○ Yes (1)
- ○ No (2)

Please sign to verify the above response.

Participant's Agreement:

I have read the information provided above. I have asked all the questions I have at this time. I voluntarily agree to participate in this research study.

Date

_____

Printed name of research participant

_____

THE RESEARCHER WILL COMPLETE THE REMAINING ITEMS; LEAVE THESE ITEMS BLANK.

Signature of research team member obtaining consent

_____

Date

_____

Printed name of research team member attaining consent

_____

End of Block: Default Question Block