Date: **Valid for Use Through:**

Principal Investigator: Joel Stoddard, MD
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Study Title: Neurocognitive Targets of Hostile Interpretation Bias Training to Treat Irritability

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You (equals you or your child) are being asked to be in a research study. This form provides you with information about the study. A member of the research team will describe this study to you and answer all of your questions. Please read the information below and ask questions about anything you don't understand before deciding whether or not to take part. A copy of this form will be given to you.

Why is this study being done?

This study plans to learn more about a promising new treatment for irritability in adolescents who are seeking outpatient mental health treatment. This new treatment is called Interpretation Bias Training. It uses a computer to show adolescents with irritability pictures of face emotions. It encourages them to rate the face emotions in a more positive way. We do not know if this treatment will work. Before we can test this treatment, we must test whether it works as it is supposed to. The treatment might work by helping adolescents with irritability learn to judge other people's emotional expressions more positively in general. If this is true, we should see that reflected in how these adolescents behave during and after training. We should also see that reflected in how their brain responds. This study will not test whether the treatment works. It is just the first step, before a formal clinical test can be done.

You are being asked to be in this research study because you have sought outpatient mental health treatment and indicated on our screening interview that you may suffer from at least mild irritability.

Up to 340 people will participate in the study.

What happens if I join this study?

If you join the study, you will complete two study visits and one online assessment.

Study Visit One (up to 3 hours)

During study visit one, you will complete questionnaires and interview with Dr. Stoddard or Dr. Penner. Both are child and adolescent psychiatrists. The interviews and questionnaires

are all about mental health issues and thinking ability. This visit will take about 2 to 2 ½ hours.

Study Visit Two (up to 2.5 hours)

Up to one week after completing your first visit, you will have a single session of training and complete a computer-based assessment.

This study will have 4 different groups of research participants like you. To decide which group you will be in, we will use a method of chance. This method is like flipping a coin or rolling dice. Each group will have a different experience. The groups will differ in two major ways. First, two groups will have "active" and the other two groups will have "sham" training. "Active" or "sham" training is described below. Second, two groups will have a training session done while in an MRI scanner and the other two groups will train in an outpatient clinic. If you are unable to scan, your session will be done out of the scanner.

<u>If you are training out of the scanner:</u>
Dr. Stoddard or his research assistant will meet you at the outpatient psychiatric clinic of the Gary Pavilion at the Anschutz Medical Campus.

You will complete the Interpretation Bias Training. The training involves three phases: assessment, training, and then assessment. Each phase will show you pictures of faces expressing either happy, angry, or mixed happy-angry expressions. These pictures will flash for a fraction of a second, and you must judge them as 'happy' or 'angry' by pressing a button.

The two assessment phases simply measure how you judge the faces. The first assessment phase takes 3 minutes. The second assessment phase still asks you to judge faces, but takes 21 minutes, because we will ask you to judge several different people's faces.

The training phase shows the same faces but gives you feedback, "right" or "wrong". You will be asked to get as many right as possible. The feedback is based on your prior responses and which type of training you receive. There are two types: "active" or "sham" training. You will not know which one you receive. In both conditions, the feedback is based on how you judged the faces. In the sham condition, the feedback corresponds exactly to your earlier judgments. In the active condition, feedback will encourage you switch your judgments of two faces from angry to happy. It is broken up 6 short blocks. The total training takes about 18 minutes.

<u>If you are training in the scanner:</u>
Dr. Stoddard or his research assistant will meet you at the brain imaging center to complete an MRI scan of your brain.

You will be given an opportunity to practice MRI scanning in a "mock scanner". This will allow you to get comfortable in the small space and to practice keeping your head still. You do not have to complete this practice, but it can be useful for participants who are sensitive to being in small spaces.

Before your MRI scan, you will be asked to complete a short form that asks about any medical conditions, or other factors (such as the presence of any non-removable metal items on your body), that would prevent you from completing such a scan. You will be reminded to remove metal items such as piercings or jewelry from your body. Female participants will complete a urine pregnancy test prior to scanning. You cannot do the study if the tests show that you are pregnant. If you are unable to scan for another reason, you may choose to train the same day, out of the scanner at the Gary Pavilion. You will also complete an assessment phase of Interpretation Bias Training.

The scan will take up to 60 minutes. During the scan, you will wear earplugs and a headset to reduce the noise you hear. You will be asked to complete a session of Interpretation Bias Training (25 minutes). You will also compete a few other scans to get a clear picture of your brain to help the analysis of the Interpretation Bias Training. During this time, you may watch a movie. These tasks will be explained to you, and any questions you have will be answered. During the scanning, Dr. Stoddard and/or his research assistant, as well as an MRI technician, will be monitoring you visually through a window and over an audio feed; we will help if you feel distressed or uncomfortable. You can stop the procedure at any time if you feel uncomfortable.

After the MRI scan is completed, you will complete the same out-of-scanner post training assessment (21 minutes). You will be reimbursed for your participation in the study.

You will receive a CD-ROM that contains an image of your brain for you to keep. However, this image will not be read by a radiologist and therefore is not diagnostic or able to tell if you have anything wrong with your brain. If you have any questions or concerns about your scan, please contact Dr. Stoddard at (720) 777-5702.

Online Assessment (up to 1/2 hour)

About a week after your second study visit, we will ask you to follow a link to complete questionnaires online. We will provide this link to you at the second study visit. If you'd prefer, we can give you paper copies of the questionnaires and a stamped enveloped in which to mail these forms to us. Either way, we will call you a day before to remind you to complete these questionnaires.

Optional agreement to be contacted for possible participation in research studies:
The principal investigator and his colleagues may be conducting additional research in the future for which you may be eligible to participate. Please indicate below by checking the appropriate box whether you would be interested in being contacted about potential studies:

Yes, I would be interested in being contacted about future research studies I may be eligible to participate in.

I decline to be contacted about possible participation in any future research studies.

If I change my mind at a later date and no longer wish to be contacted about future research studies, I can contact the principal investigator, Dr. Joel Stoddard, at joel.stoddard@ucdenver.edu or (720) 777-5702.

What are the possible discomforts or risks?

Discomforts you may experience while in this study include:

1. Some psychological discomfort or fatigue may be experienced when filling out questionnaires. If any of the questions on the questionnaires make you uncomfortable, you do not have to answer them.
2. Some psychological discomfort or fatigue may also be experienced while being in the scanner. The scan can be stopped at any time if you are uncomfortable with the testing procedure. If we discover that you describe emotional distress, then we will evaluate if you are in need for a referral for professional help. Such a referral may range from counseling to referral to the authorities for emergency treatment.
3. There is a risk of muscular aches from lying on your back for a total amount of up to one hour in the scanner.
4. Banging noises that the MRI machine makes while taking pictures of your brain are loud. However, you will be wearing noise protection ear plugs and headphones.
5. Muscle twitches during the magnetic resonance imaging procedure may occur.
6. There are no known harmful effects from the magnetic resonance imaging, but some people undergoing this procedure may become anxious and afraid of closed spaces. If this happens to you, you can stop this procedure at any time.
7. If you are pregnant or think you may be pregnant, you should not take part in this research. Researchers will not intentionally report the results of your pregnancy screening test to your parents.
8. If you have any metal clips or plates in your body or a pacemaker, you should tell the investigator about it. We will carefully screen you for any metal in your body.
9. There is a risk that people outside of the research team will see your research information. We will do all that we can to protect your information, but it cannot be guaranteed.
10. Occasionally, in the course of studies that use MRI, the investigator will discover brain imaging findings that could indicate brain damage. If a potential abnormality is detected, Dr. Stoddard will inform you of this and offer to provide an appropriate medical referral. You should be aware that the MRI scanning that is completed as part of this study is not intended to be used for any clinical purpose, and the MRI films will not be read by a radiologist or other physician.
11. The study may include risks that are unknown at this time.

What are the possible benefits of the study?

This study is designed for the researcher to learn more about how this potential treatment for irritability affects learning in adolescents seeking mental health treatment and have at least mild irritability.

Because this study will measure learning, and not treatment effects, we have no expectation that this treatment will reduce your irritability.

We will provide you the results of the clinical assessment from the first visit.

Are there alternative treatments?

This study is not intended to provide treatment.

Who is paying for this study?

This study is being paid for by the University of Colorado's School of Medicine and by a grant from the National Institute of Mental Health (NIMH) a division of the National Institutes of Health (NIH).

Will I be paid for being in the study?

Yes, the adolescent will receive gift cards worth $200 in total for completing all of the study procedures. You can choose to receive your gift cards from Amazon, Starbucks, or Target. If you withdraw from the study early, or if we have to take you out of the study, you will receive a gift card for the portions you have completed. Payment will be made at the end of your participation.

Will I have to pay for anything?

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

Is my participation voluntary?

Taking part in this study is voluntary. You have the right to choose not to take part in this study. If you choose to take part, you have the right to stop at any time. If you refuse or decide to withdraw later, you will not lose any benefits or rights to which you are entitled.

If there are any new findings during the study that may affect whether you want to continue to take part, you will be told about them.

What happens if I am injured or hurt during the study?

The University has no plan to pay for a physical or psychological injury. If you are injured or hurt during this study, you may call Dr. Stoddard at 720-777-5702. We will arrange for you to get medical or psychological care if you have an injury caused by our research. However, you or your insurance company will have to pay for that care.

In the first visit, you will undergo a comprehensive evaluation of mental health issues. If at any time during participation in the study new concerns arise, please inform Dr. Stoddard.

Who do I call if I have questions?

The researcher carrying out this study is Joel Stoddard, MD. You may ask any questions you have now. If you have questions later, you may call Dr. Stoddard at 720-777-5702.

You may have questions about your rights as someone in this study. You can call Dr. Stoddard with questions. You can also call the Colorado Multiple Institutional Review Board (COMIRB) at (303) 724-1005.

Who will see my research information?

The University of Colorado Denver and the hospital(s) it works with have rules to protect information about you. Federal and state laws including the Health Insurance Portability and Accountability Act (HIPAA) also protect your privacy. This part of the consent form tells you what information about you may be collected in this study and who might see or use it.
The institutions involved in this study include:

- Children's Hospital Colorado
- University of Colorado Denver Anschutz Medical Campus
- Dr. James McGough (Safety Monitor; UCLA)

Children's Colorado shares a medical record system with the Barbara Davis Center and PedsConnect; therefore, it is also possible that other healthcare professionals could view your information.

We cannot do this study without your permission to see, use, and give out your information. You do not have to give us this permission. If you do not, then you may not join this study.

We will see, use and disclose your information only as described in this form and in our Notice of Privacy Practices; however, people outside the University of Colorado Denver and its affiliate hospitals may not be covered by this promise.

We will do everything we can to keep your records a secret. It cannot be guaranteed.

The use and disclosure of your information has no time limit. You can cancel your permission to use and disclose your information at any time by writing to the study's principal investigator, at the name and address listed below. If you do cancel your permission to use and disclose your information, your part in this study will end and no further information about you will be collected. Your cancellation would not affect information already collected in this study.

Joel Stoddard, MD
Children's Hospital Colorado
13123 East 16th Ave.
Box 130
Aurora, CO

Both the research records that identify you and the consent form signed by you may be looked at by others who have a legal right to see that information.

- Federal offices such as the Food and Drug Administration (FDA) that protect research subjects like you.
- People at the Colorado Multiple Institutional Review Board (COMIRB).
- The study doctor and the rest of the study team.

- Officials at the institution where the research is being conducted and officials at other institutions involved in this study who are in charge of making sure that we follow all of the rules for research.

We might talk about this research study at meetings. We might also print the results of this research study in relevant journals. But we will always keep private the names and identifying information of the research participants.

- Some things we cannot keep private. If you give us any information about child abuse or neglect we have to report that to the Colorado Department of Health Services. Also, if we get a court order to turn over your study records, we will have to do that.
- Some things we cannot keep private: If we determine that you are at imminent risk for physically hurting yourself or someone else, we have to ensure that you and others are safe. This may involve escorting you or having authorities escort you for an emergency evaluation for safety at Children's Hospital Colorado Emergency Services. Also, if we get a court order to turn over your study records, we will have to do that.

You have the right to request access to your personal health information from the Investigator. To ensure proper evaluation of test results, your access to these study results may not be allowed until after the study has been completed.

This study has been issued a Certificate of Confidentiality from the federal government to help protect your privacy. The Certificate prohibits the researchers from disclosing your name, or any identifiable information, document or biospecimen from the research, with the exceptions listed below. A certificate provides protections against disclosing research information in federal, state, or local civil, criminal, administrative, legislative or other proceedings. These protections apply only to your research records. The protections do not apply to your medical records. The researchers may disclose your name or identifiable information, document or biospecimen, under the following circumstances:

- To those connected with the research,
- If required by Federal, State or local laws,
- If necessary for your medical treatment, with your consent,
- For other scientific research conducted in compliance with Federal regulations,
- To comply with mandated reporting, such as a possible threat to harm yourself or others, reports of child abuse, and required communicable disease reporting, or
- Under other circumstances with your consent.

A Certificate of Confidentiality does not protect information you or a member of your family voluntarily release.

A description of this clinical trial will be available on http://www.ClinicalTrials.gov, as required by U.S. Law. This Web site will not include information that can identify you. At most, the Web site will include a summary of the results. You can search this Web site at any time.

Information about you that will be seen, collected, used and disclosed in this study:

- Name and Demographic Information (age, sex, ethnicity, address, phone number, etc.)
- Portions of my previous and current Medical Records that are relevant to this study, including but not limited to Diagnosis(es), History and Physical, laboratory or tissue studies, radiology studies, procedure results
- Research Visit and Research Test records
- Psychological tests
- Alcoholism, Alcohol or Drug abuse
- Billing or financial information
- Other (please specify): Results of a urine pregnancy test (for female participants only)

What happens to Data and Specimens that are collected in this study?

Scientists at the University of Colorado Denver and the hospitals involved in this study work to find the causes and cures of disease. The data, tissue, blood and specimens collected from you during this study are important to this study and to future research. If you join this study:

- The data, or the tissue, blood, or other specimens are given by you to the investigators for this research and so no longer belong to you.
- Both the investigators and any sponsor of this research may study your data and tissue, blood, or other specimens collected from you.
- If data, tissue, blood, or other specimens are in a form that identifies you, UCD or the hospitals involved in this study may use them for future research only with your consent or IRB approval.
- Any product or idea created by the researchers working on this study will not belong to you.
- There is no plan for you to receive any financial benefit from the creation, use or sale of such a product or idea.

HIPAA Authorization for Optional Additional Study Procedures

In this form, you were given the option to agree to additional, optional research procedures. You must also give us your permission, under HIPAA rules, to use and disclose the information collected from these optional procedures, as described above.

If you decline to give us permission to use and disclose your information, you cannot take part in these optional procedures, but you can still participate in the main study. Please initial next to your choice:

_____ I give permission for my information, from the optional procedures I have agreed to above, to be used and disclosed as described in this section.

_____ I **do not** give permission for my information for any optional procedures to be used and disclosed; I understand that I will not participate in any optional procedures.

Agreement to be in this study and use of my data

I have read this paper about the study or it was read to me. I understand the possible risks and benefits of this study. I understand and authorize the access, use and disclosure of my information as stated in this form. I know that being in this study is voluntary. I choose to be in this study: I will get a signed and dated copy of this consent form.

Parent/guardian signature: _____ Date: _____

Print name: _____

Participant signature (if age 18): _____ Date: _____

Print name: _____

Participant's Signature (13-17 year olds): _____ Date: _____

Print name: _____

Consent form explained by: _____ Date: _____

Print name: _____