Official title: Neurally Targeted Cognitive Training to Augment CBT Outcomes in Pediatric Anxiety

NCT number: NCT04157296

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Informed Consent Form

UNIVERSITY OF MICHIGAN
CONSENT TO BE PART OF A RESEARCH STUDY

1. KEY INFORMATION ABOUT THE RESEARCHERS AND THIS STUDY

Study title: Neurally Targeted Cognitive Training to Augment CBT Outcomes in Pediatric Anxiety

Company or agency sponsoring the study:
MICHR/NIH

Names, degrees, and affiliations of the principal investigator and study coordinator (if applicable):

Principal Investigator: Yanni Liu, Ph.D., Department of Psychiatry, University of Michigan

1.1 Key Study Information

You and your child may be eligible to take part in a research study. This form contains important information that will help you decide whether to join the study. Throughout this form, "you" may mean "your child." Take the time to carefully review this information. You should talk to the researchers about the study and ask them any questions you have. You may also wish to talk to others such as your family, friends, or other doctors about joining this study. If you decide to join the study, you will be asked to sign this form before you can start study-related activities. Before you do, be sure you understand what the research study is about.

A research study is different from the regular medical care you receive from your doctor. Research studies hope to make discoveries and learn new information about diseases and how to treat them. You should consider the reasons why you might want to join a research study or why it is not the best decision for you at this time.

Research studies do not always offer the possibility of treating your disease or condition. Research studies also have different kinds of risks and risk levels, depending on the type of study. You may also need to think about other requirements for being in the study. For example, some studies require you to travel to scheduled visits at the study site in Ann Arbor or elsewhere. This may require you to arrange travel, change work schedules, find child care, or make other plans. In your decision to participate in this study, consider all of these matters carefully.

This research is studying how cognitive behavior therapy (CBT) combining computerized cognitive training (CCT) may change the brain and reduce anxiety symptoms in youth with anxiety. Your health-related information, behavioral and brain information will be collected for this research study.

There can be risks associated with joining any research study. The type of risk may impact whether you decide to join the study. For this study, some of these risks may include loss of confidentiality around sensitive information (rare, not serious), anxiety experience during therapy, or discomfort during functional magnetic resonance imaging (MRI) scan. More detailed information will be provided later in this document.

This study may offer some benefit to you now or to others in the future. The therapy and computerized cognitive training that you receive may directly benefit you; the new knowledge gained from this study

may achieve a better understanding of how therapy helps to improve anxiety. More information will be provided later in this document.

We expect the amount of time you will participate in this study will be up to 16 weeks inclusive of up to 12 weeks of treatment.

You can decide not to be in this study. You can participate in the parent study without participating in this portion. You can receive CBT for anxiety, as well as medications, without participating in a study protocol. Your eligibility for treatment at the University of Michigan is in no way affected by your decision to participate, or not, in this study.

Even if you decide to join the study now, you are free to leave at any time if you change your mind.

2. PURPOSE OF THIS STUDY

2.1 Study purpose:
The purpose of the study is to determine how cognitive behavior therapy (CBT) changes the brain in youth with anxiety. This research will show what types of brain changes are important for CBT to help reduce anxiety symptoms. In the study, we will compare CBT alone with CBT combined with another therapy, called computerized cognitive training (CBT+CCT) to help with symptoms of anxiety. In the future, we will use this information to try to improve how we deliver CBT so that it can help more patients, more fully, based on age at time of treatment.

3. WHO MAY PARTICIPATE IN THE STUDY

Taking part in this study is completely **voluntary**. You do not have to participate if you don't want to. You may also leave the study at any time. If you leave the study before it is finished, there will be no penalty to you, and you will not lose any benefits to which you are otherwise entitled.

3.1 Who can take part in this study?
You may be eligible for this study if you are an active participant with anxiety and maintain eligibility in Dimensional Brain Behavior Predictors of CBT Outcomes in Pediatric Anxiety (HUM00118950). This study will include males and females, as well as various racial and ethnic backgrounds. Those who receive CBT first as part of the parent study will not receive CCT through this protocol. Those that receive CBT after completing Relaxation and Mentorship Training (RMT) through the parent protocol will receive CBT+ CCT. To participate in CCT, you must not be color-blind, as the colors included in the CCT graphics are important signals in the game.

3.2 How many people are expected to take part in this study?
54 anxious youths (7– 17.99 years) are projected to be in the study.

4. INFORMATION ABOUT STUDY PARTICIPATION

4.1 What will happen to me in this study?
All study procedures will follow the University of Michigan's COVID-19 safety guidelines.

The study may involve the following:

1) MRI session #1 (part of the parent study, unless more than about 6 weeks have passed before you start CBT+CCT therapy)
2) Study Therapy – either CBT or CBT+CCT – up to 12 weeks (CBT is part of the parent study)

3) MRI session #2, following treatment. For those who complete CBT first as part of the parent study, your second MRI scan will be used for this study. For those who complete CBT following RMT, you may need to have a third scan after your CBT treatment is completed, and used for this study

As a subject participating in this research study, you have certain responsibilities that may apply to this study, such as ensuring that you attend all of your scheduled appointments and report any adverse reactions you may have during the study. Additionally, you must remember to complete your at-home CCT, bring the CCT iPad assigned to you to CBT every therapy session, and return the CCT iPad assigned to you at the completion of your participation in the study. When social distancing policies prohibit certain types of in-person interactions (e.g., during COVID-19), you may be asked to attend therapy/assessment appointments via remote video conference. We will use an encrypted, HIPAA-compliant video conferencing platform (e.g., BlueJeans, Zoom).

Data that has already been collected as part of Dr. Fitzgerald's *Dimensional Brain Behavior Predictors of CBT Outcomes in Pediatric Anxiety* (HUM00118950) study will be used for this study. If you have been a participant in another study run by Dr. Hanna, Dr. Sripada, Dr. Fitzgerald, or Dr. Taylor (HUM00097108, HUM00041689, HUM00088188, HUM00096646, HUM00091368), we may be able to use information gathered in those studies for the current study. Similarly, if you decide to participate in one of these trials moving forward or may qualify based on our discussion today, we may request your permission to share your information with them.

If you receive CBT first through *Dimensional Brain Behavior Predictors of CBT Outcomes in Pediatric Anxiety*, then you may complete up to two computerized behavioral assessments (up to 30 minutes each) before and after the 12-weeks of CBT, as well as an extra assessment of anxiety symptoms at week 3 of CBT. If you receive RMT first in Dr. Fitzgerald's study, then after completing RMT, you will receive CBT+CCT, and you may complete up to five computerized behavioral assessments (up to 30 minutes each) before you start RMT and before, during and after you start CBT+CCT, and you may complete up to two more MRI scans during and following CBT+CCT. These behavioral assessments may be completed in-person on an iPad (NIH toolbox) or remotely via encrypted, HIPAA-compliant video conferencing (NIH toolbox). These behavioral assessments may be completed online via a web link that will be provided to you (Millisecond).

CBT: CBT involves exposing yourself to anxiety-producing cues in a repetitive, prolonged fashion while preventing any behaviors that you would usually perform to reduce the anxiety. Although this treatment brings on anxiety, it will be done gradually in order to reduce anxiety over time. In session, you will work with your therapist to plan your treatment, as well as "homework assignments," i.e., things to practice at home. You will always stay in control of the experience. When necessary due to social distancing policies (e.g., during COVID-19), you may be asked to do CBT via remote video conference rather than in-person. We will use an encrypted, HIPAA-compliant video conferencing platform (e.g., via BlueJeans, Zoom).

CCT: Computerized cognitive training targets attention and working memory which is needed for CBT treatment. If you are selected to receive CCT prior to receipt of CBT, you may play several video games before each CBT session. When necessary due to social distancing policies (e.g., during COVID-19), you may be asked to play your CCT game at home before your CBT sessions. You may also receive CCT (~25 min/day) to do at home for up to four weeks completed in the two weeks before and/or the four

weeks after the first session of CBT. You may be asked to complete the at home CCT up to 5 days per week. You may complete the CCT game on an iPad assigned to you for the duration of your participation in the study, or you may download the CCT game onto your own personal device provided that it is compatible with the application.

Other treatment: You will be expected not to engage in any other forms of treatment (including other therapy), outside of the study, while you are receiving study therapy. You may be taking medication for ADHD, but you should be on a stable dose of it at least two weeks prior to the first scheduled MRI and throughout the time that you are receiving study therapy. If your symptoms get worse, we can permit some short-term medications to help you. If your symptoms worsen a great deal or you begin to experience thoughts of wanting to die, we may ask that you stop the study so that we can help you to find another treatment to help you to feel better and remain safe.

MRI (sessions #1 and #2)

MRI will be conducted as part of your participation in the parent study. If you receive CBT only through the parent study, the second MRI will be conducted as part of your participation in that study. MRI #2 will be completed within about 2 weeks of completion of therapy. If you complete RMT and CBT in the parent study, you may complete up to two more MRIs which are conducted as part of this consent. If applicable, you will be asked to complete these MRIs after completing the 4 weeks of at-home CCT, and within about 2 weeks of completion of CBT. Before each MRI, staff will review a safety form with you. You will be asked to wear masks at the scanner.

During the MRI, you will lie on the bed of an MRI scanner, arranged so that you feel comfortable. In order to measure your heart rate and breathing, a sensor "belt" may go around your chest and a small cuff will go over one of your fingers.

The bed will move inside the scanner, into a long tube, approximately 3 feet in diameter. An intercom system will allow you to communicate with us. Inside the scanner, you will hear periodic loud noises, and we will talk to you over the intercom at times. Information will be presented to you on a computer screen inside the scanner, and you will make responses, when required, by pressing a "button glove." This is how you will play the computer game that you learned during the practice session. At the conclusion of the MRI scan, we will ask you questions about what you have experienced. You will spend approximately an hour in the scanner, and the complete procedure (including arriving at the MRI center, parking, meeting the study team, telling about your experience, etc.) will take from 1-2 hours of your time.

Your parents/guardians may be provided with the opportunity to go into either the mock scanner or the real scanner, if they believe the experience would be helpful for them to better understand the study and/or if they believe it might help to ease any anxiety that you may experience due to participation in the study.

In the unforeseen event of technical difficulties with the MRI scanner, you may be asked to complete additional MRI sessions. If additional scans are requested, you will be compensated for your time. At P.I. discretion, you may not be required to complete an MRI if social distancing restrictions prohibit this type of in-person study activity (e.g., COVID-19). If so, you would not be compensated for this task, as you will not be asked to complete it.

4.2 How much of my time will be needed to take part in this study?
Study therapy involves up to 12 weekly sessions, up to one and a half hours for CBT group and up to about two hours for CBT+CCT group.

To minimize time and questionnaire burden, we will re-use data you have provided to Dr. Fitzgerald's study (HUM00118950).

If you receive CBT first as part of Dr. Fitzgerald's study (HUM00118950), then this add-on study may include:

- Completion of an additional computerized behavioral task before and after the CBT (~30 minutes per test). This can be done at the time of a therapy session or combined with the MRI scans and does not need to be a separate study visit. These computerized behavioral tasks may be offered to you in person using an iPad, and/or remotely via HIPAA-compliant video-conferencing/screen-sharing (e.g., BlueJeans or Zoom) or web link. You may also be asked to complete a questionnaire before, during, and after the CBT course of treatment (~10minutes per test), as well as an assessment of anxiety symptoms at or near session 3 of CBT (~30minutes).

For CBT+CCT group, you may be asked to do the following in addition to the tasks in the parent study:

- Up to five sessions of computerized behavioral assessments (up to 30 minutes each) before starting RMT as well as at or near sessions 1, 3, and 12 of CBT+CCT which may be offered in person using an iPad or via HIPAA-compliant videoconferencing/screensharing (e.g., BlueJeans or Zoom); you may complete an additional session of computerized behavioral assessments when completing the MRI during CBT+CCT
- Up to 12 weekly CCT (~30 minutes each) prior to CBT sessions which may include completion of a brief survey before and after each CCT session
- One post-therapy MRI scan (1-2 hours). If your 2nd scan was more than about 6 weeks from when you begin CBT+CCT, you may be asked to repeat that scan as well. You may also be asked to complete an MRI scan after completing the 4 weeks of at-home CCT training.
- A meeting and questionnaires with study staff on or around weeks 1, 3, 6, 9, and 12 of CBT (~30 minutes), as well as a meeting with study staff prior to beginning at-home CCT if there have been more than about 6 weeks between beginning at-home CCT and RMT week 12
- Up to four weeks of at home CCT (~25-30 min/day) completed in the two weeks before and/or the four weeks after the first session of CBT. This would be done up to 5 days per week and may include completion of a brief survey before and after each CCT session.

4.3 When will my participation in the study be over?
Once you have completed the study tasks as outlined above, your participation will be over. At P.I. discretion, your participation may be considered over even if you have not completed all of the study tasks outlined above.

After the study's CBT therapy sessions ends, those who wish to continue with therapy are typically referred to the community. The UM clinic is a short-term clinic and, as with the study, patients are usually referred into the community if treatment needs continue after several months.

4.4 What will happen with my information and/or biospecimens used in this study?
Your collected information may be shared with the National Institute of Health.

With appropriate permissions, your samples and collected information may also be shared with other

researchers, here, around the world, and with companies.

Your identifiable private information may be stripped of identifiers and used for future research studies or distributed to another researcher for future research studies without additional informed consent.

5. INFORMATION ABOUT STUDY RISKS AND BENEFITS

5.1 What risks will I face by taking part in the study? What will the researchers do to protect me against these risks?

Risk Associated with Screening and Assessments:

1) You may become tired or bored during the assessments.

   To minimize risk: You will be allowed to take breaks and are welcome to split assessments into separate visits.

2) Loss of confidentiality around sensitive information (rare, not serious).

   To minimize risk: Study records are linked to a research number, rather than your name, and are kept in a locked file cabinet in a locked room. The few records that must include your name (consent form, payment records) are kept in locked file cabinets, physically separate from other study information. Links between research numbers and names are kept in a single, electronic file on a secure, password-protected computer that only researchers can access.

   We will keep your answers strictly confidential, and not even your parents will be able to see your responses if you do not want them to see those responses. However, if we believe that you or somebody else might be hurt, based on what you tell us, we are legally obligated to do something that might involve breaking this confidence, in order to prevent anyone from being hurt.
   Video conference sessions will use a secure link that will protect your confidentiality to the degree permitted by the technology being used. Although every reasonable effort has been taken, confidentiality during actual web-based or phone communication procedures cannot be guaranteed.

3) Some of the interview questions may make you feel uncomfortable.
   To minimize risk: Interviewers are experienced clinicians who have worked with many psychiatry patients, including those with anxiety. They are trained to help you feel comfortable when discussing your thoughts and feelings. In addition, during your interview, you are free to refuse to answer any of the questions.

Risks Associated with MRI Scanning:

1) Discomfort or anxiety from being in the confined space of the MRI scanner.

   To minimize risk: You will practice doing a "pretend" MRI scan so you get used to it. We will also give you pillows and blankets and help you to get comfortable in the scanner. During your scan, you can communicate with study team on an intercom and can tell us any time if you want to stop the scan. You will be under no obligation to complete the study if you wish to end it at any time.

2) You may experience the task that you perform in the scanner as difficult or boring

   To minimize risk: There will always be a researcher there to help you if you want to take a

break or stop the study.

3) Peripheral nerve stimulation. Some studies, like this one, have the potential to induce peripheral nerve stimulation (PNS), which feels like a light touch on your skin. PNS is not harmful and the feeling goes away in a few seconds or minutes.

   To minimize risk: The MRI machine is operated within FDA guidelines so the potential for PNS is low.

4) Slight dizziness, light-headedness or nausea can occur during or right after the scan.

   To minimize risk: If you feel light-headed, you will be asked to get up from the scanner bed very slowly, sitting first for a few seconds until you stop feeling dizzy, and then standing up.

5) Magnetic resonance imaging could reveal something in your brain, such as a tumor, that will require additional studies, and maybe even treatment.

   To minimize risk: If we see something that you should be concerned about, we will carefully explain this to you and offer our recommendations about what you would need to do. A person experienced in reading MRI scans ('neuro-radiologist') will look at your MRI scan and tell us about any things that need additional examination.

6) Hearing damage from loud, vibrating noises made by the scanner.

   To minimize risk: You will wear foam earplugs to reduce the loud noises made by the scanner and prevent any hearing damage. You will be able to talk to us throughout the study, and you will be able to let us know right away if you want to stop the study and get out of the scanner.

7) Injury. The scanner is like a magnet and can move metal objects and cause them to heat up. Any metal outside or on your body (jewelry, keys, medication patch) must be removed before scanning. If you have metal inside your body (braces on teeth, a pacemaker for heart), then you cannot do this MRI study.

   To minimize risk: The MRI suite is kept clear of objects that could be picked up by the magnetic field. Before you enter this suite, we will help you to check and make sure that you have removed any loose metal objects from your body or pockets. We will also ask you if you have any metal in your body (devices like a pacemaker) that would prevent you from being able to take part in this study.

Additionally, there may be a risk of loss of confidentiality or privacy. See Section 9 of this document for more information on how the study team will protect your confidentiality and privacy.

As with any research study, there may be additional risks that are unknown or unexpected.

5.2 What happens if I get hurt, become sick, or have other problems as a result of this research?
The researchers have taken steps to minimize the risks of this study. Even so, you may still have problems or side effects, even when the researchers are careful to avoid them. Please tell the researchers listed in Section 10 about any injuries, side effects, or other problems that you have during this study. You should also tell your regular doctors**.**

In the event of crises or should unusual needs/circumstances arise, additional treatment sessions can be provided to address these needs as indicated in the parent study. A maximum of 2 additional off-

protocol sessions is allowed for each phase of the study (CBT or CBT+CCT). Participants who require more than this limited intervention will be withdrawn and clinical care recommended.

5.3 If I take part in this study, can I also participate in other studies?
Being in more than one research study at the same time, or even at different times, may increase the risks to you. It may also affect the results of the studies. You should not take part in more than one study without approval from the researchers involved in each study.

5.4 How could I benefit if I take part in this study? How could others benefit?
You may not receive any personal benefits from being in this study. However, this study may benefit brain science in general because it is designed to contribute new knowledge to the field. More specifically, this study could also help youth who suffer from anxiety if it leads to a better understanding of how therapy helps to improve anxiety.

In addition, the therapy and CCT that you receive may directly benefit you when you participate in this study. It is also possible that the treatment does not work for you.

Although MRI scans are routinely used to diagnose certain medical conditions, the scanning procedures used for this study are not very sensitive for many common medical conditions. Therefore, you should not expect to learn anything about any brain lesions or abnormal conditions that you think you may or may not have.

5.5 Will the researchers tell me if they learn of new information that could change my willingness to stay in this study?
Yes, the researchers will tell you if they learn of important new information that may change your willingness to stay in this study. If new information is provided to you after you have joined the study, it is possible that you may be asked to sign a new consent form that includes the new information.

6. ALTERNATIVES TO PARTICIPATING IN THE STUDY

6.1 If I decide not to take part in this study, what other options do I have?
You can receive treatment for anxiety without participating in a study protocol. Your eligibility for treatment at the University of Michigan is in no way affected by your decision to participate, or not, in this study.

7. ENDING THE STUDY

7.1 If I want to stop participating in the study, what should I do?
You are free to leave the study at any time. If you leave the study before it is finished, there will be no penalty to you. You will not lose any benefits to which you may otherwise be entitled. If you choose to tell the researchers why you are leaving the study, your reasons for leaving may be kept as part of the study record. If you decide to leave the study before it is finished, please tell one of the persons listed in Section 10 “Contact Information”. If you would like to continue in treatment, but outside the protocol, the study team will refer you to somebody who can provide these treatments.

7.2 Could there be any harm to me if I decide to leave the study before it is finished?
Your participation in this study is entirely by your own free choice. You may drop out of the study at any time, even after having agreed to become a subject. Although your doctor may have told you about the study, your participation is not a part of your regular medical/psychiatric treatment. If you decide not to

participate, your medical care will not be affected in any way and you will continue to receive the same treatment.

7.3 Could the researchers take me out of the study even if I want to continue to participate?
Yes. There are many reasons why the researchers may need to end your participation in the study. Some examples are:

- The researcher believes that it is not in your best interest to stay in the study.
- You become ineligible to participate.
- Your condition changes and you need treatment that is not allowed while you are taking part in the study.
- You do not follow instructions from the researchers.
- The study is suspended or canceled.

8. FINANCIAL INFORMATION

8.1 Who will pay for the costs of the study? Will I or my health plan be billed for any costs of the study?
The study will pay for research-related items or services that are provided only because you are in the study. There should be no charges from the University of Michigan to you for your participation in the study. If you get a bill you think is wrong, call the researcher's telephone number listed in Section 10.1.

You or your health plan will pay for all the things you would have paid for even if you were not in the study, like:

- Health care given during the study as part of your regular care
- Items or services needed to give you study drugs or devices
- Monitoring for side effects or other problems
- Deductibles or co-pays for these items or services.

If you do not have a health plan, or if you think your health plan may not cover these costs during the study, please talk to the researchers listed in Section 10 below or call your health plan's medical reviewer.

If you would like to continue treatment beyond the maximum of 12 sessions of CBT set out in the study protocol, then you, or your insurance company, will be responsible for payment for these services.

By signing this form, you do not give up your right to seek payment if you are harmed as a result of being in this study.

8.2 Will I be paid or given anything for taking part in this study?
Subjects will be paid for their participation in this study. Please note that these amounts below are approximate, and the amount you earn will depend upon the study activities completed. Some participants will make less than these stated amounts.

CBT Only – up to $30:

- $10 for each behavioral assessment (NIH toolbox and/or Millisecond) and questionnaire session (up to $20)
- $10 for assessment of anxiety symptoms and questionnaire session at or near week 3 of CBT

CBT+CCT – up to $420:

- $50 for each MRI scan, up to 3 (up to $150)
- $10 for each behavioral assessment (NIH toolbox and/or Millisecond) (up to $50)
- $15 for each weekly CCT and therapy session that you attend, along with the completion of periodic assessments (up to $180)
- $10 for each week of at home CCT training during the two weeks prior to and the four weeks after the first session of CBT if you complete at least 4 days/5 days of at home training (up to $40)

You will not receive additional payments for the same tasks that are completed as part of Dr. Fitzgerald's study (HUM00118950).

If there is an occasion where we request you to attend supplemental study visits at the Rachel Upjohn Building (e.g. an additional MRI practice session), you will be paid $15 for your time.

Payments will be paid by Mastercard gift card and sent via U.S. mail. You will receive the payment at the end of your participation in this study.

If you are called back for an MRI due to technical difficulties with the scanner, you will be paid $50.

If you withdraw from or are withdrawn from the study early, you will not be paid for those study visits/procedures you did not complete at the time of your departure.

8.3 Who could profit or financially benefit from the study results?

It is very unlikely that anybody will profit financially from the results of this study. We have no plans to commercialize any of these tests. Research can lead to new discoveries, such as new tests, drugs, or devices. Researchers, their organizations, and other entities, including companies, may potentially benefit from the use of the data or discoveries. You will not have rights to these discoveries or any proceeds from them.

9. CONFIDENTIALITY OF SUBJECT RECORDS AND AUTHORIZATION TO RELEASE YOUR PROTECTED HEALTH INFORMATION

The information below describes how the confidentiality of your research records will be protected in this study, and any sub-studies described in this document.

9.1 How will the researchers protect my information?

Notes regarding your treatment in this clinic will be kept in the Michigan Medicine electronic medical record, which is standard practice for any patients – research or clinical – receiving treatment in our clinics or hospitals. As part of your Michigan Medicine medical file, this documentation will be governed by institutional and legal rules for keeping medical records confidential. Your name will be directly linked to this electronic medical record and accessible to your Michigan Medicine providers. Even if you are not eligible for this study, a note may be included in your medical record regarding the study visit with information considered by the research team to be important to continuity of care. We may also communicate with a referring provider to let them know whether or not you are eligible or to communicate further treatment recommendations.

We will also put information collected about you during the study into a research record. This research record is different than the Michigan Medicine medical record. It will not show your name, but will have codes entered in it, that will allow the information to be linked to you. Completed measures and

participant information will be kept until screened out if participant is not currently eligible but might become eligible in the future. You will not be identified in any reports on this study. We shall not allow anyone to see your research record, other than people who have a right to see it (see next section). We shall keep your research record confidential, to the extent provided by federal, state and local law. For example, if we learn in the interview that you are feeling as if you might hurt yourself or another person, or we feel you may have been harmed or in danger (i.e., suspected child abuse) we may be obligated to bring this to the attention of qualified authorities who would prevent any harm befalling anybody. Similarly, if we learn that your parent or guardian is at risk, we will take the same safety precautions.

Data about you may be collected in paper files or using an online survey, designed and administered on the Qualtrics Research Suite (http://www.qualtrics.com/). Qualtrics is the preferred online survey tool of the University of Michigan. There are security precautions in place to protect against unauthorized access, but there is a small risk of unauthorized access. There are systems in place that prevent the survey from being taken more than once. None of your study Qualtrics survey responses will be linked to you except via a code. For more information, Qualtrics security and privacy statements can be found at http://www.qualtrics.com/security-statement and http://www.qualtrics.com/privacy-statement.

Data about you may be collected using a web link, designed by Millisecond (https://www.millisecond.com/) and sent to you by study staff. There are security precautions in place to protect against unauthorized access, but there is a small risk of unauthorized access. Data from your assessments would be stored on the Millisecond website, under a password-protected account. This data would then be downloaded and stored electronically on a secure drive. Once stored in the secure drive, this data would be removed from the website. None of your study Millisecond behavioral assessment data will be linked to you except via a code. For more information, the Millisecond security and privacy statements can be found at https://www.millisecond.com/products/securitystatement.aspx and https://www.millisecond.com/products/privacystatement.aspx.

You may be asked to complete assessments and computerized behavioral tasks remotely via videoconferencing and/or screensharing. If offered remotely, the sessions will use either BlueJeans video conferencing (https://www.bluejeans.com/) or Zoom video conferencing (https://zoom.us/). BlueJeans and Zoom provide a cloud-based audio/video/content-sharing conferencing service. U-M's agreements with both BlueJeans and Zoom include a Business Associate Agreement. This means individuals may use this service to share Protected Health Information (PHI) regulated by HIPAA. For more information, BlueJeans Security and Privacy agreements with the University of Michigan can be found at https://safecomputing.umich.edu/dataguide/?q=node/181, and Zoom Security and Privacy agreements with the University of Michigan can be found at https://support.zoom.us/hc/en-us/articles/207652183-HIPAA-Business-Associate-Agreement-BAA-. Your confidentiality will be kept to the degree permitted by the technology being used. Although every reasonable effort has been taken, confidentiality during actual web-based or phone communication procedures cannot be guaranteed.

No part of the medical or research record will be released without your written consent.

This research is covered by a Certificate of Confidentiality from the National Institutes of Health. The researchers with this Certificate 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 action, suit, or proceeding, or be used as evidence, for example, if there is a court subpoena, unless you have consented for this use. Information, documents, or biospecimens protected by this Certificate cannot be disclosed to anyone else who is not connected with the research except, if there is a federal, state, or

local law that requires disclosure (such as to report child abuse or communicable diseases but not for federal, state, or local civil, criminal, administrative, legislative, or other proceedings, see below); if you have consented to the disclosure, including for your medical treatment; or if it is used for other scientific research, as allowed by federal regulations protecting research subjects.

The Certificate cannot be used to refuse a request for information from personnel of the United States federal or state government agency sponsoring the project that is needed for auditing or program evaluation by the NIH which is funding this project or for information that must be disclosed in order to meet the requirements of the federal Food and Drug Administration (FDA). 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 you want your research information released to an insurer, medical care provider, or any other person not connected with the research, you must provide consent to allow the researchers to release it.

The Certificate of Confidentiality will not be used to prevent disclosure as required by federal, state, or local law. It may not be used to prevent disclosure for the purposes of ensuring safety. This may include disclosure for reasons such as child abuse and neglect, or harm to self or others.

The Certificate of Confidentiality will not be used to prevent disclosure for any purpose you have consented to in this informed consent document.

9.2 What protected health information (PHI) about me could be seen by the researchers or by other people? Why? Who might see it?

Signing this form gives the researchers your permission to obtain, use, and share information about you for this study, and is required in order for you to take part in the study.

Medical information and billing records are protected by the privacy regulations of the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA). This type of information is called protected health information (PHI). PHI about you may be obtained from any hospital, doctor, and other health care provider involved in your care, including:

- Hospital/doctor's office records, including test results (X-rays, blood tests, urine tests, etc.)
- Mental health care records (including psychotherapy notes not kept with your medical records)
- Alcohol/substance abuse treatment records
- All records relating to your condition, the treatment you have received, and your response to the treatment
- Billing information
- Demographic information
- Personal identifiers

There are many reasons why information about you may be used or seen by the researchers or others during or after this study. Examples include:

- The researchers may need the information to make sure you can take part in the study.
- The researchers may need the information to check your test results or look for side effects.
- University, Food and Drug Administration (FDA) and/or other government officials, auditors, and/or the IRB may need the information to make sure that the study is done in a safe and proper manner.

- Study sponsors or funders, or safety monitors or committees, may need the information to:
    - Make sure the study is done safely and properly
    - Learn more about side effects
    - Analyze the results of the study
- Insurance companies or other organizations may need the information in order to pay your medical bills or other costs of your participation in the study.
- The researchers may need to use the information to create a databank of information about your condition or its treatment.
- Information about your study participation may be included in your regular UMHS medical record.
- If you receive any payments for taking part in this study, the University of Michigan accounting department may need your name, address, Social Security number, payment amount, and related information for tax reporting purposes.
- Federal or State law may require the study team to give information to government agencies. For example, to prevent harm to you or others, or for public health reasons.
- If you tell us or we learn something that makes us believe that you or others have been or may be harmed, we may be required to report that information to the appropriate agencies.
- De-identified data may be shared with other investigators seeking to understand higher brain function and neuropsychiatric disorders.
- Akili, who has developed the software used in this study, may receive information about your CCT performance. Akili may also be given de-identified research data (e.g., demographic information and cognitive, clinical, and survey data) aggregated across all participants.
- If you receive payment of $600 or more for taking part in this study, the University of Michigan accounting department will collect your name, address, social security number, payment amount, and related information. For tax reporting purposes this information must be sent to the Internal Revenue Service (IRS).

The results of this study could be published in an article, but would not include any information that would let others know who you are.

This trial will be registered and may report results on www.ClinicalTrials.gov, a publicly available registry of clinical trials.
The research information collected in this study may be shared with other researchers, at Michigan and other institutions, who are trying to understand the brain and mental illness. This information would be shared in a way that will remove all things that identify you. It would not be possible for these other researchers to learn who you are from the information that we share.

Data from this study may be submitted to the National Institute of Mental Health Data Archive (NDA). NDA is a data repository run by the National Institute of Mental Health (NIMH) that allows researchers studying mental illness to collect and share de-identified information with each other. A data repository is a large database where information from many studies is stored and managed. De-identified information means that all personal information about research participants such as name, address, and phone number is removed and replaced with a code number. With an easier way to share, researchers hope to learn new and important things about mental illnesses more quickly than before.

During and after the study, the researchers will send de-identified information about your health and behavior and in some cases, your genetic information, to NDA. Other researchers nationwide can then

file an application with the NIMH to obtain access to your de-identified study data for research purposes. Experts at the NIMH who know how to protect health and science information will look at every request carefully to minimize risks to your privacy.

You may not benefit directly from allowing your information to be shared with NDA. The information provided to NDA may help researchers around the world treat future children and adults with mental illnesses so that they have better outcomes. NIMH will also report to Congress and on its web site about the different studies that researchers are conducting using NDA data. However, you will not be contacted directly about the data you contributed to NDA.

You may decide now or later that you do not want to share your information using NDA. If so, contact the researchers who conducted this study, and they will tell NDA, which can stop sharing the research information. However, NDA cannot take back information that was shared before you changed your mind. If you would like more information about NDA, this is available on-line at http://data-archive.nimh.gov.

9.3 What happens to information about me after the study is over or if I cancel my permission to use my PHI?

As a rule, the researchers will not continue to use or disclose information about you, but will keep it secure until it is destroyed. Sometimes, it may be necessary for information about you to continue to be used or disclosed, even after you have canceled your permission or the study is over.

Examples of reasons for this include:

- To avoid losing study results that have already included your information
- To provide limited information for research, education, or other activities. (This information would not include your name, social security number, or anything else that could let others know who you are.)
- To help University and government officials make sure that the study was conducted properly

As long as your information is kept within the University of Michigan Health System, it is protected by the Health System's privacy policies. For more information about these policies, ask for a copy of the University of Michigan "Notice of Privacy Practices". This information is also available on the web at http://www.uofmhealth.org/patient+and+visitor+guide/hipaa. Note that once your information has been shared with others as described under Question 9.2, it may no longer be protected by the privacy regulations of the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA).

9.4 When does my permission to use my PHI expire?

Your permission will not expire unless you cancel it. You may cancel your permission at any time by writing to the researchers listed in Section 10 "Contact Information" (below). If you withdraw your permission, you may no longer be eligible to participate in this study.

10. CONTACT INFORMATION

10.1 Who can I contact about this study?

Please contact the researchers listed below to:

- Obtain more information about the study
- Ask a question about the study procedures or treatments
- Talk about study-related costs to you or your health plan
- Report an illness, injury, or other problem (you may also need to tell your regular doctors)
- Leave the study before it is finished
- Express a concern about the study

Principal Investigator: Yanni Liu, Ph.D.
Mailing Address: 4250 Plymouth Rd, Ann Arbor, MI 48105
Telephone: [redacted]

You may also express a question or concern about a study by contacting the Institutional Review Board listed below:

University of Michigan Medical School Institutional Review Board (IRBMED)
2800 Plymouth Road
Building 520, Room 3214
Ann Arbor, MI 48109-2800
Telephone: 734-763-4768 (For International Studies, include the appropriate calling codes.)
Fax: 734-763-1234
e-mail: irbmed@umich.edu

If you are concerned about a possible violation of your privacy or concerned about a study you may contact the University of Michigan Health System Compliance Help Line at 1-866-990-0111.
When you call or write about a concern, please provide as much information as possible, including the name of the researcher, the IRBMED number (at the top of this form), and details about the problem. This will help University officials to look into your concern. When reporting a concern, you do not have to give your name unless you want to.

11. RECORD OF INFORMATION PROVIDED

11.1 What documents will be given to me?

Your signature in the next section means that you have received copies of all of the following documents:

- This "Consent to be Part of a Research Study" document. (*Note: In addition to the copy you receive, copies of this document will be stored in a separate confidential research file or saved electronically on a secured drive and may be entered into your regular University of Michigan medical record.)*

12. SIGNATURES

Sig-A

Consent/Assent to Participate in the Research Study (Assent 15-17 years old)

I understand the information printed on this form. I have discussed this study, its risks and potential benefits, and my other choices with [NAME OF STUDY TEAM MEMBER OBTAINING CONSENT] _____. My questions so far have been answered. I understand that if I have more questions or concerns about the study or my participation as a research subject, I may contact one of the people listed in Section 10 (above). I understand that I will receive a copy of this form at the time I sign it and later upon request. I understand that if my ability to consent or assent for myself changes, either I or my legal representative may be asked to re-consent prior to my continued participation in this study.

Print Legal Name: _____

Signature: _____

Date of Signature (mm/dd/yy): _____

Sig-B

Consent/Assent to video/audio recording solely for purposes of this research
This study involves video and/or audio recording and/or photography. If you do not agree to be recorded, you can still take part in the study.

Participant initials

_____ Yes, I agree to be video recorded. _____ Yes, I agree to be audio recorded

_____ No, I do not agree to be video recorded. _____ No, I do not agree to be audio recorded

Parent initials

_____ Yes, I agree to my child to be video recorded. _____ Yes, I agree to my child to be audio recorded

_____ No, I do not agree to my child to be video recorded _____ No, I do not agree to my child to be audio recorded

Parent:
Print Legal Name: _____

Signature: _____

Date of Signature (mm/dd/yy): _____

Participant Age 15-18 years old

Print Legal Name: _____

Signature: _____

Date of Signature (mm/dd/yy): _____

Sig-C

Legally Authorized Representative or Parent Permission

Subject Name (if under age 18): _____

Parent/Legally Authorized Representative):

Printed Legal Name: _____

Signature: _____

Address: _____

Date of Signature (mm/dd/yy): _____

Relationship to subject: ☐ Parent ☐ Spouse ☐ Child ☐ Sibling ☐ Legal guardian ☐ Self ☐ Other

If "Other," explain: _____

Reason subject is unable to consent (if applicable): _____

If this consent is for a child who is a ward of the state (for example, a foster child), please tell the study team immediately. The researchers may need to contact IRBMED.

Sig-D

Principal Investigator or Designee

I have provided this participant and/or his/her legally authorized representative(s) with information about this study that I believe to be accurate and complete. The participant and/or his/her legally authorized representative(s) indicated that he or she understands the nature of the study, including risks and benefits of participating.

Printed Legal Name: _____

Title: _____

Signature: _____

Date of Signature (mm/dd/yy): _____