

Department of Psychology
ASSENT

Project Title: Attention Training to Modify ERN and Risk for Anxiety in Adolescence

Principal Investigator: Greg Hajcak, Ph.D.

You are being asked to be in a research study.

Purpose: The purpose of this study is to understand how your brain and body respond to thinking and feeling. Adolescence is a time when people begin to think and feel differently, and we are interested in understanding those changes. Around 660 adolescents (ages 11 to 14) will be included in this study.

What will be done: If you agree to be in this study, we will ask that you participate in two lab visits, about two years apart. After your first visit, you may be asked to complete some tasks at home on your computer or mobile device and return for another visit 8 weeks later. You can decide not to participate in the additional training or the second visit. At each lab visit, you will complete some/all of the following:

1. *Recording Session:* We will record your behavior, muscle and brain activity, while you are making decisions about things we show you on a computer screen, playing some games on a computer, or just looking at pictures. We will ask you to wear a cap that contains recording disks filled with gel. Your hair may need to be cleaned after the task; the gel washes off completely and easily. All of these recordings are painless and safe.
2. *Guessing Game:* In this game, you will be shown doors on the screen and asked to choose a door. There is money behind some doors, and there is nothing behind other doors. In this task you can make between \$0.00 and \$15.00, depending on how many correct guesses you make.
3. *Arrow Task:* You will perform tasks that require you to make rapid and accurate decisions about images that are presented on the screen. The computer screen will display one of four images on each trial: <<<<<, <<><<, >><>>, or >>>>>; your job is to respond to the direction of the central arrow and ignore the others.
4. *Picture Viewing Task:* You may be asked to participate in a picture-viewing task in which you will view some emotional pictures. Some pictures will be pleasant (i.e. animals, food), some will be neutral (i.e. household objects), and some will be unpleasant (i.e. spiders, guns).
5. *Social Task:* You may also perform a task where you will see pictures of other kids and you'll vote on whether or not you like them. Also, you will receive feedback from other kids.
6. *Surveys:* You will be asked to fill out surveys about your how you feel, how you think, your body, and your relationships.
7. *fMRI:* You may also take part in a fMRI scanner. This involves recording your brain activity while you're lying down. You must keep very still while you are in the scanner. It is very noisy but completely painless.
8. *Reaction Time Task:* You may play a reaction time task where you will press a mouse button in response to a white box appearing on the screen. Depending on how quickly you respond, you will receive feedback on whether or not you won or lost any money on that trial. There will be a no money condition in which you will not win or lose any money no matter how quickly you respond. In this task you can make between \$0.00 and \$10.00, depending on how quickly you respond.
9. *Interview:* You will participate in an interview about your feelings, thoughts, activities, and relationships with others. With your permission, this interview will be video or audio-taped

to allow us to monitor the reliability of our ratings.

10. *Additional Training:* You may be asked to complete additional tasks at home following your initial visit. This would be a computerized training, much like a video game. You would be asked to complete two (2) 20-minute sessions per week for eight (8) weeks. You will receive \$5 for each session you complete, for up to 16 training sessions in total. For every 100 levels you pass, you will receive 5 dollars. If you complete all 16 sessions, you will receive a bonus of \$20. If you do this training, we would also ask that you come back for an additional lab visit afterwards. This visit will be much like the first—and you will get paid \$20 for each hour, plus a \$40 bonus for coming back.

Depending on how many of the tasks you are chosen for and want to complete, the study visit will take approximately 3-4 hours to complete. You will be paid \$20 for each hour you participate, and will get frequent breaks.

Costs to you: You will not have to pay anything to be in this study.

Payment to you: You will be paid \$20 an hour for your participation in this study. Also, you will be paid up to \$15.00 as a bonus based on your guesses in the guessing task. If you are selected to complete additional tasks at home, you will receive up to \$80, plus a bonus of \$20 for completing all sessions, plus 5 dollars every time you reach a hundred levels. You will then be asked to return for the post-assessment, for which you will receive a bonus of \$40 in addition to \$20/hour and money earned during the guessing task. If you participate in the second lab visit two years later, we will also give you a bonus of \$40, in addition to \$20/hour and money earned during the guessing task. For every eligible participant you refer to the project, your family will receive \$10 in cash or Amazon gift cards.

Risks/ Discomforts: You may get tired or uncomfortable from doing the study. You are welcome to take short breaks. There is a small chance of getting mild skin irritation (redness) where the sensors contact the skin. However, this is rare and temporary. When you are participating in the MRI portion of the study, you may feel a little scared about the tight space within the MRI machine. Before completing the task, you will be taken to a fake scanner—at the fake scanner, you can see the machine, and hear the noises it makes. During the MRI, you will have a device in your hand that will allow you to tell us if you need attention immediately. You will be able to communicate with us and may stop anytime you want by squeezing the device. The MRI itself produces a loud banging noise throughout the MRI session that some people find uncomfortable or annoying. We will give you earphones to wear which will help block out some of the noise. You will hear us give you directions through the earphones. There are no known risks of having an **MRI during pregnancy, but to be safe pregnant women are not eligible to participate in that portion of the study.** You will not be allowed to participate in the fMRI portion of the study if you have metal objects (i.e., braces) or certain devices in your body (e.g., pacemaker), and you will be required to remove all metallic objects from your person before entering the scanner (e.g., jewelry).

Benefits: There is no direct benefit to you, but we expect that people in general will benefit from more information about how the brain and body respond to thinking and feeling.

Confidentiality: All the information we get from you will be kept private and confidential to the extent permitted by law. If you express concerns about hurting yourself or others, we will not be able to keep that information private—and we will have to inform your parent. We will not write down your name on our forms, so after the session we won't be able to tell who the data came from. All your responses, physical recordings, will only have your subject number on them, not your name. If any papers and talks are given about this research, your name will not be used.

Your Rights:

- The fact that you are in the study will be kept a secret.
- You don't have to be in the study if you don't want to be.
- You can change your mind at any time and leave the study without any problem and without telling us why.
- If we find out anything that may make you change your mind about being in this study, we will tell you.

Questions:

If you have any questions about the study, you can ask your parents, or contact the study director, Dr. Greg Hajcak, at greg.hajcak@med.fsu.edu. Dr. Hajcak's office is located in the Psychology B building, room 439; 850-645-9268. If you want to talk to someone other than the researcher, you or your parents can contact the FSU IRB at 2010 Levy Street, Research Building B, Suite 276, Tallahassee, FL 32306-2742, or 850-644-8633, or by email at humansubjects@fsu.edu.

If you sign below, it means that you have read this form and you would like to be in this study.

Printed Name of Minor Subject	Date	Signature of Minor subject

Name of Person Obtaining Consent	Date	Signature of Person Obtaining Consent