

# ELGAN-ECHO

Winter/Spring 2025



## WHAT'S NEXT

Thank you for all you have done for the Environmental influences on Child Health Outcomes (ECHO) Program. This year, we invite any ELGANs under the age of 21 to sign up for a 2025 study visit. For this phase of the study, we will ask you to complete the NIH Mobile Toolbox Cognition Battery, a series of 5 game-like tasks completed on a mobile device, in an app called MyCap. The mobile devices needed for this task are iOS 16 and newer and Android OS 10 and newer. If you are not sure whether your mobile device will work, we can

help you check. During your study visit, we will help measure your height and weight and get a blood spot sample (if you agree). We will also contact your parent/guardian separately to complete 30 minutes of online surveys. If you are under the age of 21 and would like to participate, please contact Janice Wereszczak at [jwereszc@med.unc.edu](mailto:jwereszc@med.unc.edu) or call the study line at **(984) 974-7869** to sign up for the next round of surveys and schedule your 2025 remote study visit!

## RESEARCH TEAM PROFILE

Hi everyone, I'm ZiYan Britt and I am the new study coordinator at UNC for the ELGAN-ECHO

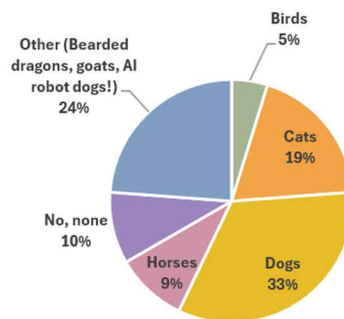


study. I am an experienced researcher, I love working with participants, and I am excited to meet all of you! I will be coordinating and conducting study visits as well as serving as a main contact for any study questions you may have. My interests include cooking delicious vegan food, visiting the Eno River with my dog, and watching sunrises and sunsets. I hope to learn more about you all throughout the study!

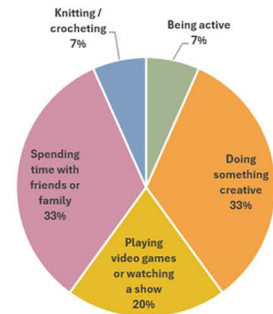
## POLL RESULTS

Thanks to everyone who answered our last newsletter's "Getting to Know ELGANs" poll! Results are in: the first pie chart shows your many kinds of pets, and the second chart shows your favorite ways to spend time.

What pets do ELGANs have?



How do ELGANs like to spend time?



## OUR ECHO, OUR HEALTH

Want to learn more about the ECHO study? Join **Our ECHO, Our Health** on Facebook to connect with participants, researchers, and community members. Scan the QR code to join or go to the below link!  
[Facebook.com/share/g/1erSuvtYbc](https://www.facebook.com/share/g/1erSuvtYbc)

Scan to join!



## RESEARCH RESULTS

**At age 15, we asked ELGANs about their mental health using a diagnostic interview called the MINI-KID. This was one of the first times a research study had explored mental health in teenagers born preterm, and the first time so many participants had completed such a detailed interview. Here is what we found...**

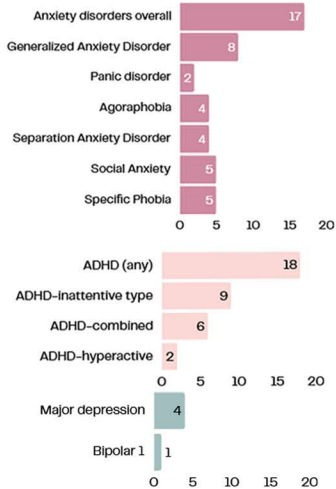
Most ELGANs (66%) didn't have any mental health concerns. However, about one in 3 met criteria for one or more mental health conditions.



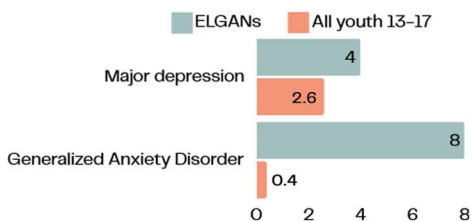
That's a rate **50% higher** than among full term teens.

- 15%** met criteria for **1** psychiatric condition
- 9%** met criteria for **2** conditions
- 8%** met criteria for **3 or more** conditions

The most common mental health concerns were highly treatable conditions like anxiety, ADHD and depression.

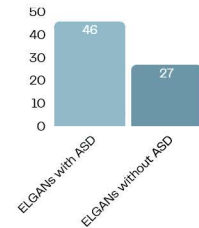


Compared to a national survey of youth aged 13-17, ELGANs were especially at risk of showing signs of depression and generalized anxiety.



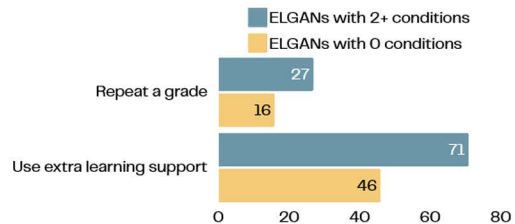
Mental health conditions were not found in any particular combinations in the same person. However...

ELGANs with Autism Spectrum Disorder (ASD) were more likely to have anxiety and/or ADHD than other ELGANs.



Having many mental health challenges made school and daily life harder. Compared to ELGANs who didn't have any mental health conditions, ELGANs who met criteria for 2 or more conditions...

- were more likely to repeat a grade
- were more likely to use extra learning support in school



## Why is this research important?

Understanding that kids born preterm are at higher risk for mental health conditions helps families and doctors recognize early signs and provide support. Researchers are also using these insights to develop early interventions for a stronger start in mental health. Thank you for your very valuable contributions to these efforts!

## What's next?

These results are over five years old - you have changed a lot since then! When we looked at your overall health at age 15, we found that almost 50% of ELGANs got healthier between the ages of 10 and 15. We plan to keep checking in on your mental health to learn more about how things change as you get older.



## RESEARCH RESULTS

### **We don't know exactly why ELGANs are more likely to meet criteria for mental health conditions than people who were born full term, but we have found some links that seem to add to the risk:**

- **Being born earlier.** Although all ELGANs were born extremely preterm, those born around 23 weeks showed more anxiety at age 10 than those born closer to 28 weeks.

**Why does it matter?** The earlier a baby is born, the less time their brain has to develop with support from the mother and placenta, and the more illnesses they tend to develop in the first months of life. These health issues and shorter time in the womb can disrupt brain development and contribute to difficulties with coordination, learning, and social communication, which can contribute to anxiety. On top of that, babies who were born very premature often have to go through more stressful medical procedures in early life that may "train" the brain to expect danger.

- **Having health problems.** Children with issues like eye problems, motor control difficulties, and asthma showed more signs of anxiety and depression at age 10 and/or 15 years.

**Why does it matter?** Having health problems can be scary and stressful, so it could be that having more health problems leads to a higher risk of anxiety and

depression. But it could also be that something else about being born prematurely leads to a higher risk of both mental and physical health conditions.

- **Having inflammation after birth.** We found that higher inflammation in the first month of life raised the risk of ADHD at age 10. This was especially true when there were several days of inflammation in the first month of life.

**Why does it matter?** Inflammation helps defend against infection, but sometimes inflammation can hurt the body and change the way the brain develops. Some researchers think that when inflammation happens in the parts of a baby's brain that help with attention, impulse control, and decision-making, it can lead to ADHD symptoms later in life.

The connection between inflammation and changes in the brain later in life is one of the most important findings from the ELGAN study. Researchers now are using insights from your results to help test new medicines and treatments that protect premature babies' brains from the harmful effects of too much inflammation. Thank you for helping this work!

The Participant and Family Advisory Board has launched! This group of about 20 members meets regularly to guide the ELGAN study. Currently, they're exploring new ways to share study results back to participants and families. To get involved, contact Sid Ratkiewicz at [sratkiew@ad.unc.edu](mailto:sratkiew@ad.unc.edu).

## GOT RESOURCES?

We're updating our website's resources! If you know of any online resources you think other ELGANs might find useful, email us at [sratkiew@ad.unc.edu](mailto:sratkiew@ad.unc.edu).

## ADVISORY BOARD

## THANK YOU!

Now more than ever, ELGANs are a busy group of people - whether you're working full time, serving in the armed forces, attending college, vocational training, or trying out one of many other trails through life. Even so, ELGANs across the country found time over the last 2 years to contribute to another phase of the ELGAN ECHO study. We think that's incredible! Congratulations on achieving over two decades of participation in our remarkably long-running study, and thank you so much for your continued support of this research. We're looking forward to seeing many of you again in 2025!

- The 2025 study team

Mike, Rebecca, Julie, Janice, Jim, Audrey, ZiYan & Sid

