



The State of Ohio Adversity and Resilience Study (SOAR) is a first-of-its-kind mental health research effort in history with government, academia and the private sector working together.

The SOAR study:

- Is the most inclusive mental health research effort in history, examining a range of medical, social and psychological factors.
- Will include 15,000 volunteers across Ohio’s 88 counties, and 3,600 multigenerational volunteers.
- Could uncover the causes and modifiable risk and resilience factors of mental illness, suicide and addiction.

There has never been an effort of this scale, scope, and depth in the history of mental health research.

This SOAR Interim Report highlights the significant progress SOAR has made since launch and identifies preliminary and promising findings that will begin to shape mental health and resilience.





Ohio has seen an alarming rise in mental illness, suicide and deaths related to overdose during the past decade, and these mental health challenges impact entire families and communities.

The state of Ohio and its communities have a strong commitment to helping Ohio families live up to their full potential.

This commitment involves multiple strategic initiatives, including SOAR. SOAR will research, develop, evaluate and implement increasingly effective mental health, substance use disorder and suicide prevention, treatment and recovery strategies.

This longitudinal, family-integrated multigenerational study will help us to discover actionable, modifiable behaviors, thoughts, practices, groups and places that will transform pathways to resilience for families, ultimately helping Ohioans live to their full potential.

2024 SOAR ACCOMPLISHMENTS/PRELIMINARY FINDINGS

SOAR Wellness Discovery Survey (Wave 1):

- 12,188 responses (over 81% participation to the goal of 15,000) in the Wellness Discovery survey. (*Figure 1* shows the response rates across the 15 geographical, racial and economic areas in Ohio as of Oct. 2024.)
- Participation across all age ranges (*Figure 2*), and racial and ethnic response rates match the 2020 census for Ohio.

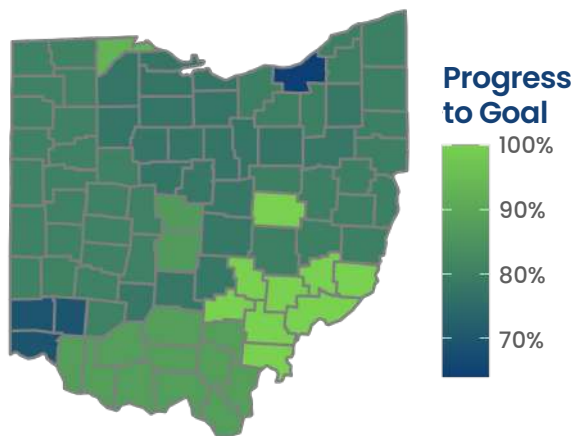


Figure 1. Response rates for the Wellness Discovery survey in different regions. 100% reflects the target number of responses for a region.

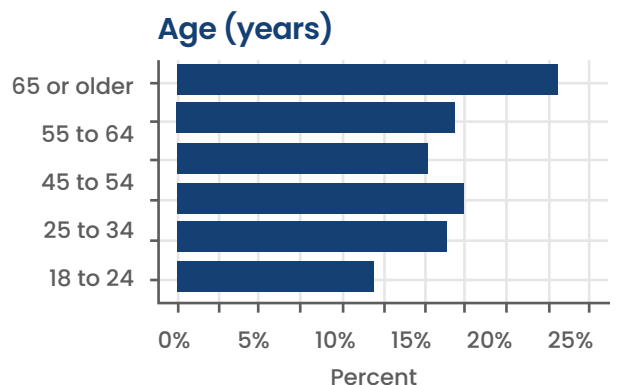


Figure 2. Response rates for the Wellness Discovery survey (by census age groups).

- Preliminary analysis establishes the validity of the data gathered: The SOAR sample shows modifiable risk factors that have been observed in other studies. This provides confidence that we can learn what we need from SOAR:
 - **Sleep Difficulties** – are related to increases in depression symptoms (*Figure 3*).
 - **Reduced Social Connection** – is related to higher distress (*Figure 4*).
 - **Binge Drinking** – 8% of survey responses indicate binge drinking monthly (or more frequently).
 - **Suicidal Ideation** – 13% endorsed “my life is not worth living” at some time in the past year.
 - **Loneliness** – 39% of Ohioans currently report high levels of loneliness.
 - **Hopelessness** – 8% of the sample reported feeling hopeless most or all of the time in the last 30 days.

Figure 3. Illustration of the association between sleep disruption and increases in depressed mood.

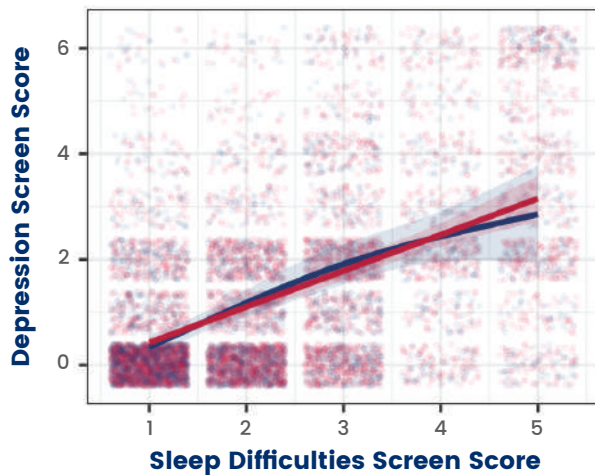
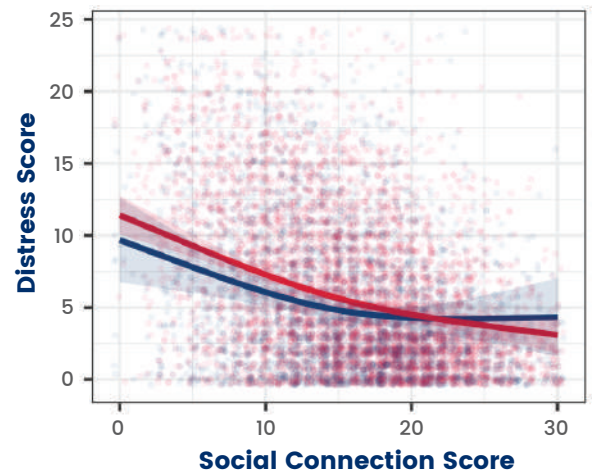


Figure 4. There is a relationship between increasing social connection and lower levels of distress.



Sex: ■ Male ■ Female

- Preliminary analysis of resilience responses indicates promising avenues for SOAR studies to pursue further:
 - **Resilience** – 49% agree or strongly agree with the statement, “I usually come through difficult times with little trouble.”
 - **Hope** – 55% of the responses suggested mostly true or definitely true to the statement, “I can think of ways to get what is important.”
 - **Meaning** – 81% agree or strongly agree with, “My life has meaning.”
 - **Emotion Regulation** – 6% of Ohioans report strong emotion regulation skills. While 12% of Ohioans report low emotion regulation skills (cognitive reappraisal). This is a resilience skill set that can be taught and improved.

Data Release for Wave 1 of SOAR Wellness Discovery:

February 2025

Data available for partners

May 2025

Wellness Discovery survey report released

July 2025

Anonymized data available to interested scientists

- **Note:** For the following preliminary statistics, we recommend avoiding overinterpretation. Data collection is ongoing. Over 5,000 more respondents will be added to complete the Wellness Discovery survey and analysis (Wave 1).

BRAIN HEALTH STUDY

- SOAR partners have recruited 370 families (686 individuals) for the Brain Health Study in just nine months. All five stationary sites and the two mobile sites are actively recruiting families. (There are careful regulatory steps for a multimodal study for the entire state.) This led to methodical roll out of sites from March 2024 to September 2024.
- 686 individuals signed up across the state:
 - 267 in the Ontario/Mansfield area.
 - 109 in the Jackson area.
 - 59 in Cincinnati.
 - 110 in the central Ohio.
- Researchers referred 15 individuals for medical care based on MRI scan findings.
- More than 200 individuals connected with mental health or addiction services.
- Cognitive testing was completed as part of the Brain Health study. Cognitive skills are what we develop in our educational systems and can be strengthened to help individuals to be more effective in their day-to-day lives.
 - *Figure 5* illustrates some of the scores collected so far for a learning and memory test. The expected values in learning and memory are present, as well as typical types of declines in memory that may occur in latter parts of the lifespan.

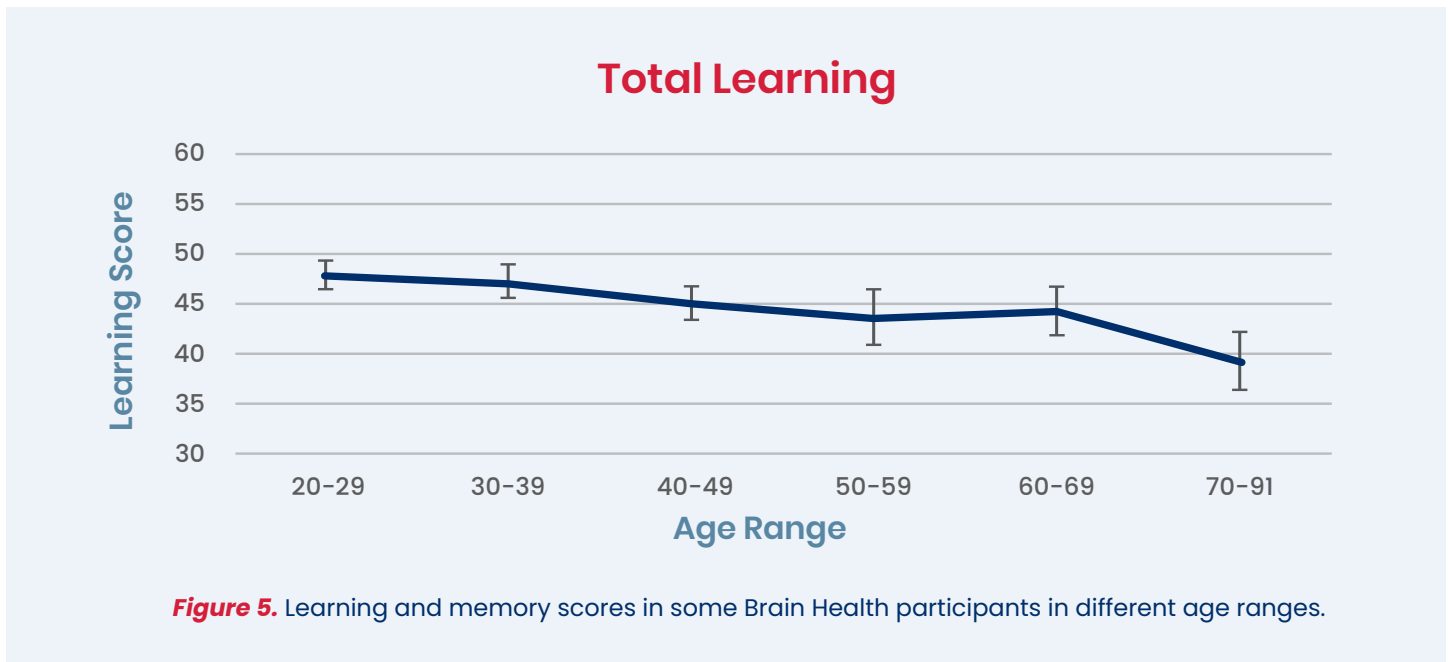


Figure 5. Learning and memory scores in some Brain Health participants in different age ranges.

Data Release for Wave 1 of SOAR Brain Health Study:

📅 July 2025

Data collection completed

📅 September 2025

Data release to partners

📅 November 2025

Initial full report released

📅 July 2026

Anonymized data is available to interested scientists

WHAT ARE PEOPLE SAYING ABOUT PARTICIPATION IN SOAR?

- Participation satisfaction is at 92% (felt supported), while 98% found the study interesting.
- An excerpt of some notes collected from participants are shown in the testimonials in *Figure 6*.
- Top three things that people liked most about the Brain Health Study:
 - Study activities.
 - Positive interactions with staff.
 - Purpose of the study.
- Opportunities for participation exist for any Ohio resident age 12 or above.

TESTIMONIALS

Figure 6.

“I am 69 years old, divorced three times and have to travel over an hour to see my psychiatrist. Our community is desperately in need of mental health assistance. I would welcome the chance to participate in SOAR.”

“I identify as a person in long-term recovery from a dual diagnosis. I am extremely excited to hear about the efforts being made to better understand the etiology of addiction and mental illness. Please let me know how I can be of assistance.”

“I am very interested in being a part of the SOAR studies program. I have dealt with mental health issues for the majority of my life. Most of which went untreated.”

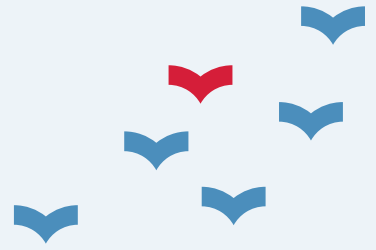
“I am a 36 year old ... with bipolar disorder and would like info on your SOAR program. I’ve withstood a lot from homelessness, my father passing and losing a body part. I’d like to give my input.”

“I survived a self-inflicted gunshot wound this year. I am passionate about mental health and figuring out what more can be done to prevent suicide attempts. Please let me know how I can participate.”

“This is very interesting; I’m a high school counselor and I’ve definitely seen an increase in suicidal ideation and mental health issues since I started in this field in 2005. I’d love to learn more.”

There is great momentum in SOAR.

Participation rates, progress and enthusiasm for the study are at incredibly high levels across the state. We continue to expand our coalition partners (11 universities and medical centers), and with important stakeholders. (See Community Engagement Addendum A for more information.)



WHAT IS THE VISION FOR SOAR?

SOAR will be a public-private-academic partnership to last multiple generations – revealing modifiable factors that can enhance resilience for Ohioans. This partnership can, with continued enthusiasm and support, catalyze innovative breakthroughs in Ohio research and health care. It can transform how we think about, talk about, and address challenges with adversity in Ohio and around the world.

SOAR will transform our awareness and understanding of mental health and addiction – to revolutionize the way we prevent and treat mental health and addiction disorders – so all Ohioans can live with meaning and connection.

TIMELINE FOR MEASUREMENT CADENCE AND EXPECTED OUTCOMES

The expected timeline of measurements and outcomes for SOAR is in *Figure 7*. We break outcomes and “actionable, modifiable” targets for building resilience into short-term deliverables. Measurements for the Wellness Discovery and Brain Health studies are planned for two-year intervals (waves) over the next decade. Long-term deliverables emerge over time as we see shifting patterns of resilience in Ohioans.

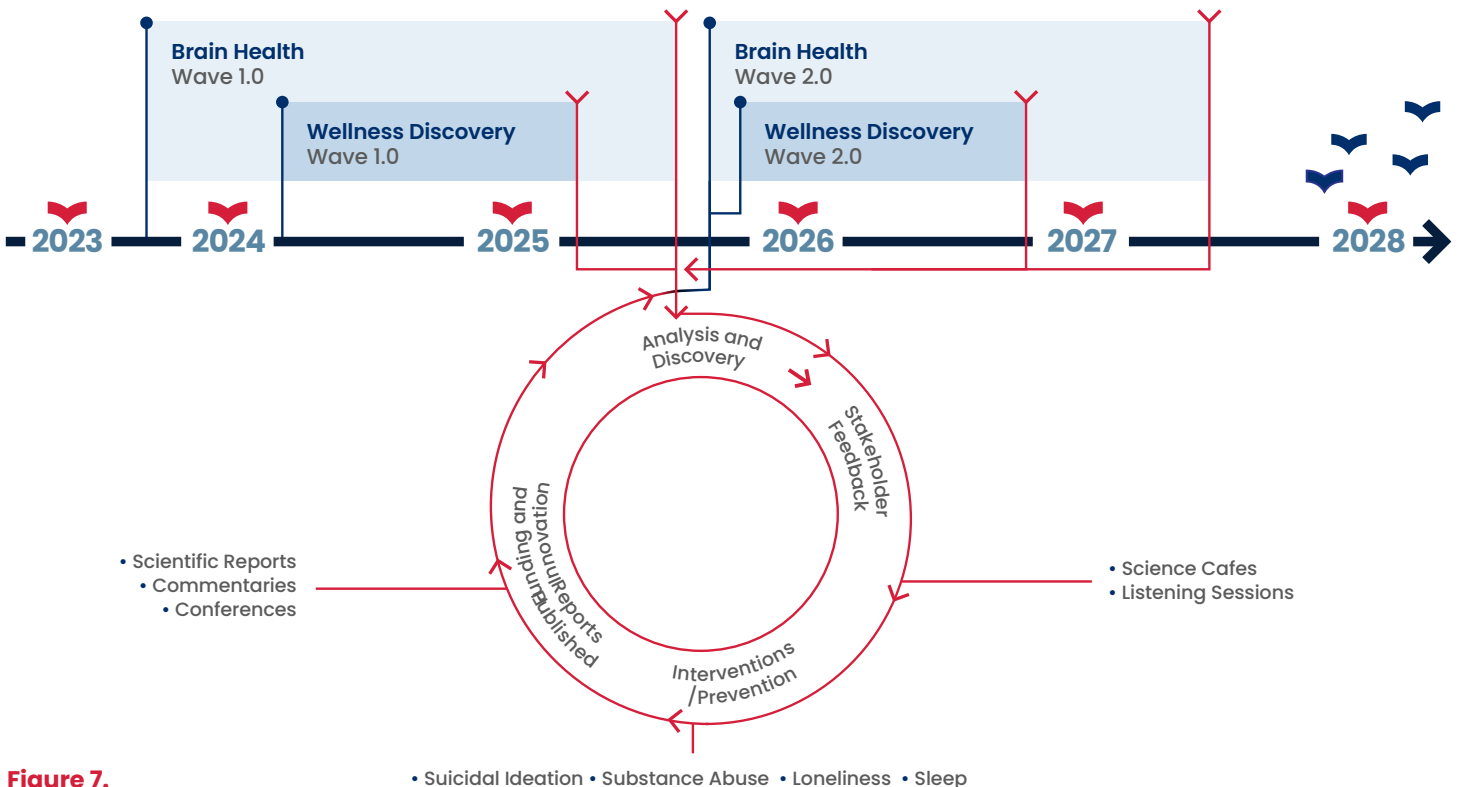


Figure 7.

EARLY ACTIONABLE TARGETS TO IMPROVE MENTAL HEALTH AND ADDICTIONS IN OHIO FAMILIES

The SOAR team will work closely with OhioMHAS and community stakeholders to share what we learn and to develop new pilot interventions and offerings that can enhance resilience in Ohioans. Here are some exemplars of existing programs with demonstrated benefits that could be tested in SOAR 2.0.

- **Loneliness** – targeted to increase meaning in the workplace through social connection teams.
- **Emotion regulation** – targeted to increase agency and cognitive reappraisal in tweens and teens for coping with stressful events.
- **Hopelessness** – targeted to address negative thoughts and increase engagement in men – anonymous online groups.
- **Sleep** – targeted to increase sleep duration and quality through improved sleep hygiene and routine – through online self-guided modules.
- **Binge drinking** – targeted intense emotion reduction to reduce triggers for excessive drinking – via brief interventions with fear exposure and cognitive restructuring.

ADDENDUM A: COMMUNITY ENGAGEMENT SUMMARY – INTERIM

BUILDING OUR COMMUNITY NETWORK

From June through October of 2024, we more than doubled our community engagement network with local community organizations and stakeholders compared to January through May of 2024, now reaching **120+ different community organizations and stakeholders** since the launch of SOAR (See *Figure 8*). In addition, from June through October 2024, we attended over **60 community events** in Jackson, Ontario and Franklin counties alone, and **have hosted two community events** to introduce the mobile unit to communities. The SOAR Community Engagement team held meetings with 65+ organizations in southeast Ohio as well as five organizations in northwest Ohio, contributing to significant and important efforts across the state, to raise awareness of SOAR’s mission, and to build a network of trust and relationships with community members and stakeholders, including the diverse voices from all regions of Ohio.

Community Outreach Activities



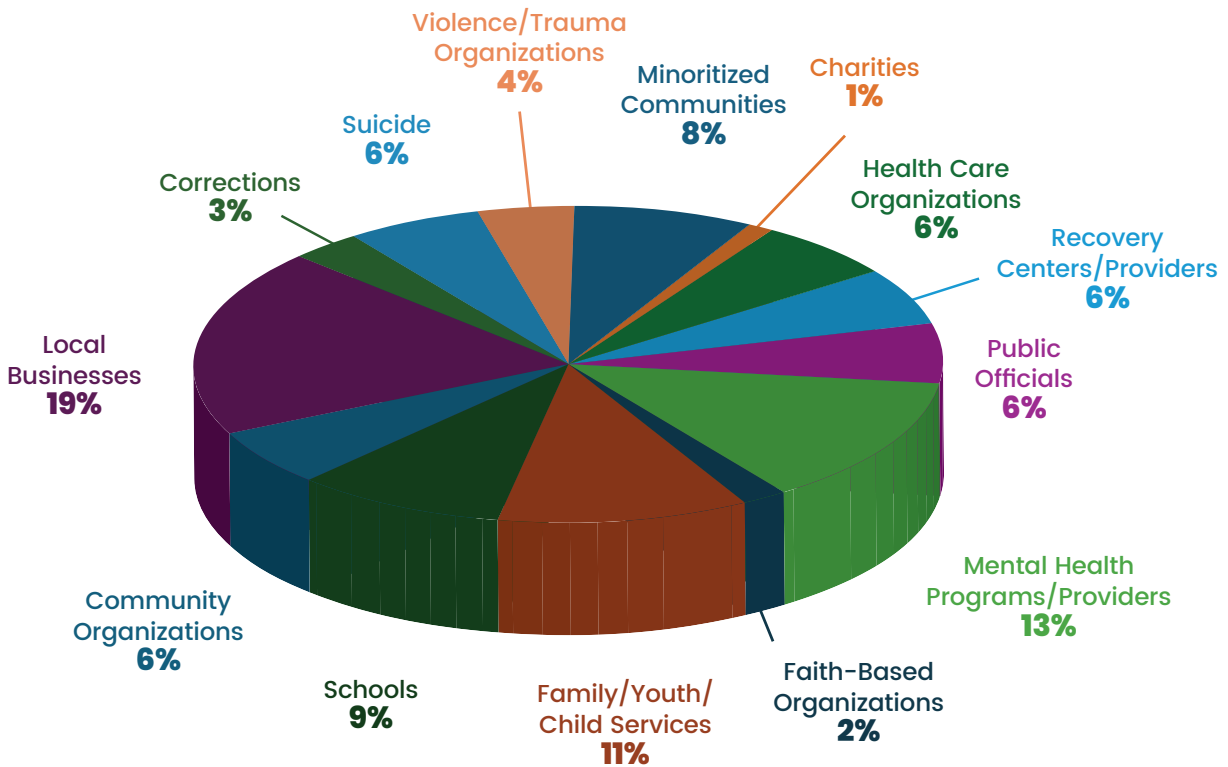


Figure 8. The different audiences among the 120+ organizations and community stakeholders SOAR has engaged with.

SOAR has invested significant time and energy in being present in communities and meeting with stakeholders in service of our commitment to build a community network across the state that will facilitate dissemination of SOAR findings and discoveries in ways that are useful to the communities we are studying.

We have also been providing information about resources and care navigation with Ohioans who participate in SOAR.

Since the launch of SOAR, we have had 127 media hits, including national *Yahoo! News* along with these major Ohio newspapers: *The Columbus Dispatch*, *Cleveland.com* and *Canton Repository*. Broadcast coverage included multiple stories on *Spectrum News* across Ohio, along with TV and radio coverage in Columbus, Cleveland, Lima, Youngstown and Jackson

COMMUNITY STAKEHOLDERS

We have directly met and connected with persons with lived experience, mental health and recovery advocates and organizations, mental health and addiction professionals and clinical organizations, educators and schools, faith leaders and faith-based organizations, ADAMH boards, county coalitions, health departments, policy professionals, law enforcement and corrections organizations, business and corporate leaders, and more. SOAR has consulted with Community Advisory Boards (CABs) across the state and is forming its own CABs in the communities we serve.

FUTURE COMMUNITY ENGAGEMENT COMMITMENT

Our commitment to community engagement in SOAR means “showing up” in person to meet the community as well as creating discussions with individuals and organizations about the health priorities of Ohioans. SOAR will continue this work and begin hosting events such as Community Wellness Forums and Science Cafes to share and discuss progress and early results. We have been actively listening to all of these communities and stakeholders to better understand their experience, their values and priorities, and how these priorities can be translated into action within SOAR’s research aims. For example, several community stakeholders have expressed interest in learning about what we find from SOAR to better help their communities. In turn, we are listening and working on a plan of action, with input from the stakeholders, that will allow us to share our SOAR findings in ways that are accessible and useful to communities.

Thank You to Our Growing List of Partners

