

Infant and Early Childhood Mental Health Awareness In Alabama: **EVERY CHILD DESERVES A HEALTHY START**

PREPARED BY:

MAYA EWART



TABLE OF CONTENTS

Acknowledgments	3
Acronyms and Definitions	4
Executive Summary	5
Background	6
Importance of IECMH	6
IECMH in Alabama	8
Evidence Review	14
Make Ideas Stick	14
Public Awareness	17
Early Childhood Messaging	18
IECMH in Other States	19
Evaluative Criteria	21
Strength of Evidence	21
Filling a Gap	21
Political Feasibility	21
Messaging Campaign Themes	22
Theme 1: Importance of Early Childhood Brain Development	22
Theme 2: COVID-Driven Increases in IECMH Demands	23
Theme 3: Long-Term Effects of Early Trauma	25
Theme 4: Economic Returns of Early Childhood Intervention	27
Outcomes Matrix	28
Implementation	29
Funding	29
Memorability of Messaging	29
Media Elements	30
References	32
Appendix	42
Hart Research Associates & Echelon Insights (2021)	42
PerryUndem et al. (2017)	44

ACKNOWLEDGEMENTS

I would like to thank Dallas Rabig at the Alabama Department of Early Childhood Education for giving me the opportunity to work on such an important issue. This report would not have been possible without her guidance and insight. I would also like to thank my advisor, Professor Lucy Bassett, for her unwavering support and mentorship. Lastly, I would like to thank Ashley Staggers and Lina Hong for their thoughtful editing and feedback.

DISCLAIMER

The author conducted this study as part of the program of professional education at the Frank Batten School of Leadership and Public Policy, University of Virginia. This paper is submitted in partial fulfillment of the course requirements for the Master of Public Policy degree. The judgements and conclusions are solely those of the author, and are not necessarily endorsed by the Batten School, by the University of Virginia, by the Alabama Department of Early Childhood Education, or by any other entity.

HONOR STATEMENT

On my honor as a student, I have neither given nor received unauthorized aid on this assignment.

A handwritten signature in black ink that reads "Maya Ewart". The signature is fluid and cursive, with "Maya" on top and "Ewart" below it, though the two names are connected.

ACRONYMS

ACE	Adverse Childhood Experience
ADECE	Alabama Department of Early Childhood Education
ADHR	Alabama Department of Human Resources
ADMH	Alabama Department of Mental Health
AEIS	Alabama Early Intervention Services
APC	Alabama Partnership for Children
CSPI	Center for Science in the Public Interest
CST	Community Service Treatment
CYFD	Children, Youth, & Families Department
IECMH	Infant and Early Childhood Mental Health
IECMHC	Infant and Early childhood Mental Health Consultation
MHBG	Mental Health Services Block Grant
NAMI	National Alliance for Mental Illness
NCTSI	National Child Traumatic Stress Initiative
PATHS	Pediatric Access to Telemental Health Services
PDG B-5	Preschool Development Grant Birth to Five
PN3	Prenatal to Three
SAMHSA	Substance Abuse and Mental Health Services Administration
SUCCES	Simplicity, Unexpectedness, Concreteness, Credibility, Emotions, Stories

DEFINITIONS

Infant and Early Childhood Mental Health – How well a child develops close relationships, regulates and expresses emotions, and explores their environment from birth to age five (ZERO TO THREE, 2016).

Infant and Early Childhood Mental Health Consultation – Mental health professionals partner with caregivers and early childhood specialists to infuse activities and interactions that promote healthy social and emotional development, prevent the development of problem behaviors, and intervene to reduce the occurrence of challenging behaviors (Perry & Kaufmann, 2009).

EXECUTIVE SUMMARY

Alabama has only 16 infant and early childhood mental health consultants for 353,925 children ages birth to five years old (Alabama Department of Mental Health & Alabama Department of Early Childhood Education, 2020; Rabig, 2020). Funding for infant and early childhood mental health consultation (IECMHC) workforce development is set to expire at the end of 2022. A lack of trained professionals would limit Alabama's ability to provide IECMHC services. *Without legislative financial support, early childhood preventative mental health services will continue to be oversubscribed and underfunded, leaving Alabama youth vulnerable to poor social and emotional health later in life.*

My client, The Alabama Department of Early Childhood Education (ADECE), offers IECMHC, which is available to all Alabama children ages birth to five years old. To approve a funding increase for IECMHC, the Alabama state legislature needs quantitative data that supports the effectiveness of the program. Because the IECMH system of care is in its infancy, there remains a lack of qualified professionals to fill needed positions, resulting in the need for workforce development. This creates a Catch 22. Without funding to increase workforce capacity, the system of care cannot fill positions and data cannot be collected. The IECMH Leadership Teams, which include staff in both ADECE and Alabama Department of Mental Health (ADMH), need to convince the legislature about the importance of continued funding for IECMH and ensure a sustainable system of care.

ADECE believes there is a current lack of knowledge in Alabama on IECMH. This information gap makes it difficult to rally support to sustain and expand the existing state IECMH system of care. ADECE is looking to develop a statewide messaging campaign to educate the public on IECMH and its long-term effects on Alabamians.

I recommend that ADECE center its messaging campaign on the importance of early childhood brain development. The messaging campaign would explain how early childhood experiences shape children's brain development and lay the foundation for their emotional, physical, and social health. Research shows that Americans are interested in early childhood brain development, but currently uninformed (PerryUndem et al., 2017). Messaging on early childhood brain development is non-partisan and convincing, especially among White and Republican audiences, suggesting that this theme would be successful in Alabama (Hart Research Associates & Echelon Insights, 2021).

Next steps include developing and rolling out the messaging campaign. Funding for the messaging campaign can be secured through ARPA. Making messaging that tells a story and is simple, unexpected, concrete, and credible can ensure Alabamians remember and reflect on the importance of IECMH (Heath & Heath, 2008). Given U.S. and Alabama media consumption, I recommend that Alabama allocate more funding towards ads on YouTube, Facebook, and TV (Harvey, 2019; Pew Research Center, 2021).

BACKGROUND

IMPORTANCE OF IECMH

Children ages birth to three years old are most vulnerable to environmental influences, including caretaker interactions and maltreatment (Murphy et al., 2018). Negative environmental influences put young children at risk of developing mental health issues (CDC, 2021).

Early childhood mental health issues are not uncommon. Up to 14 percent of children from birth to five years old experience emotional or social disturbances (Brauner & Stephens, 2006). Adverse childhood experiences (ACEs) are traumatic childhood events, such as experiencing or being exposed to violence or natural disasters. Over 60 percent of US adults surveyed by the CDC in 2021 reported experiencing at least one ACE (CDC, 2021).

Toxic Stress and Early Childhood

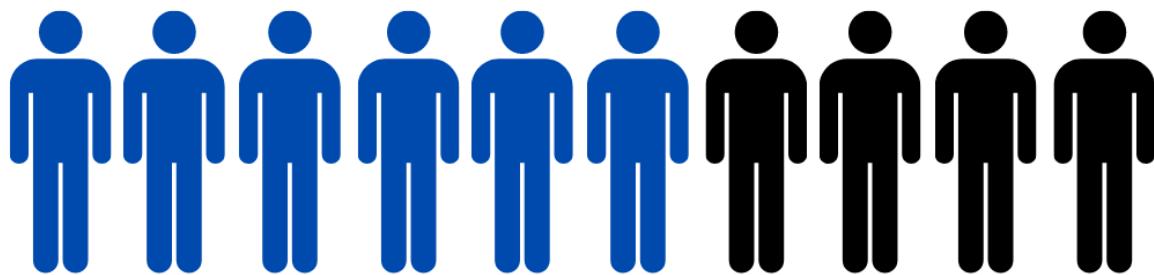
When children deal with trauma and do not have supportive caregivers to fall back on, they may experience toxic stress (Center on the Developing Child, 2020). Toxic stress overloads the stress response leaves children in a constant state of fight-or-flight, which causes physical and emotional wear and tear (Center on the Developing Child, 2020). When in this survival mode, the brain cannot learn (Cozolino, 2013). Children with insecure attachments experiencing toxic stress may struggle with anxiety, emotional regulation, attention, and trusting others (Cozolino, 2013; Van der Kolk, 2005).

Long Term Impacts of IECMH Issues

The effects of toxic stress extend well beyond childhood. Unmitigated exposure to toxic stress during early childhood is associated with higher rates of unstable relationships and chronic physical and mental illnesses (Wuermlie et al., 2021). ACEs are linked to limited educational attainment and lower incomes during adulthood (CDC, 2021). Preschool aged children with ACEs are more likely to be suspended or expelled from preschool (Zeng et al., 2019). Young children who are expelled are 10 times more likely to drop out of high school, get held back, struggle academically, and be incarcerated (Lamont et al., 2013; Petras et al., 2011; Skiba et al., 2006).

Experiencing multiple ACEs is not uncommon and puts children at an even greater risk of developing long-term mental and physical issues. As of 2020, 14.7 percent of people in the U.S. experienced two or more ACEs. Alabama ranks above the national average at 15.4 percent (United Health Foundation, 2020).

**APPROXIMATELY 60 PERCENT OF US
ADULTS EXPERIENCE AT LEAST ONE
ADVERSE CHILDHOOD EXPERIENCE**



**ADVERSE CHILDHOOD EXPERIENCES ARE
LINKED TO:**



**LOWER EDUCATIONAL
ATTAINMENT**

**DECREASED
EARNINGS**

**CHRONIC MENTAL AND
PHYSICAL HEALTH**

How IECMHC Can Help

Support for early childhood development and secure attachments mitigate toxic stress and foster resilience during childhood and later in life (Interagency Network for Education in Emergencies, 2010; Murphy et al., 2018). IECMHC educates caregivers on the impact of relationships and environment on child development and equips caregivers with the tools to protect their children's social and emotional well-being. By establishing safety and stability during a critical period of development, IECMHC protects children from long-term mental and physical issues. IECMHC has been found to mitigate suspensions and expulsions, along with teacher and caregiver stress (ZERO

TO THREE, 2017). These outcomes are especially relevant, given that rates of caregiver stress and early childhood emotional development issues have increased during the pandemic (RAPID-EC, 2022; Barnett & Jung, 2021).

IECMH IN ALABAMA

Alabamians are concerned about children's mental health. Alabama Children's Policy Councils ranked mental health as their number one policy concern, citing a lack of inpatient beds, mental health counselors, and outpatient services (Alabama Children's Policy Council, 2020). A statewide Alabama Department of Public Health survey of approximately 6,000 individuals found that of 59 policy health issues, respondents identified mental health and substance abuse as the second most pressing. The number one issue was access to care (Alabama Department of Public Health, 2021).

IECMH Prevalence in Alabama

Limited data is available on early childhood mental health issue rates in Alabama. Existing data primarily focuses on children in general or those over five years old.

As of 2019, over 20 percent of children ages 6-17 in Alabama have at least one mental disorder, such as anxiety or depression. Furthermore, Alabama is in the top quartile of states for percent of children with one or more mental disorders and for percent of children not receiving treatment (Devitt, 2020). Mental Health America ranked Alabama 20th among states in terms of youth mental health (Mental Health America, 2022).

Forty-eight percent of children in Alabama have experienced at least one ACE (Alabama Children's Trust Fund, 2018). Poverty, abuse, and neglect are ACEs that put children at risk of developing emotional and social issues (CDC, 2021). As of 2018, 28.4 percent of Alabama children under age five live in poverty. In 2019, 11.1 percent of Alabama children showed signs of abuse or neglect (VOICES for Alabama Children, 2020).

IECMH Workforce in Alabama

Alabama is beginning to develop an IECMH system of care but is limited by a workforce shortage. Few Medicaid mental health service providers are trained to provide appropriate intervention and support to families with children ages birth to five (Rabig, 2020).

Alabama's workforce shortage far surpasses those of other states. [Alabama has the lowest number of mental health providers in the country](#), with approximately 121 providers per 100,000 people. In comparison, the national ratio is approximately 284 providers per 100,000 people (United Health Foundation, 2022).

COVID-19 has only exacerbated the IECMH workforce shortage. 370,000 early education professionals left the field between February and April of 2020. As of 2021, the child care workforce is 17 percent smaller than the pre-pandemic early childhood workforce (Bureau of Labor Statistics & US Department of Labor, 2021).

IECMH Legislative Funding

The Preschool Development Grant Birth to Five (PDG B-5), which expires at the end of 2022, provides \$200,000 to Troy University to maintain an IECMH Graduate Certificate Program and \$230,000 to the Office of Infant and Early Childhood Programs for other workforce development activities (Alabama Department of Early Childhood Education, 2019). Without funding, these programs will either need to be fully self-sustainable or will need to seek funding elsewhere to continue the work.

Non-legislative funding financed several large IECMH initiatives in Alabama over the past eight years. In 2014, Project LAUNCH, a Substance Abuse and Mental Health Services Administration (SAMHSA) grant, helped identify the lack of IECMH support in Alabama and started to finance programming, including IECMH consultation. The W.K. Kellogg Foundation grant contributed \$40,000 to start the Office of Infant and Early Childhood Programs, an association that advocates for IECMH principles in early childhood and caregiver services (*Alabama Infant and Early Childhood Mental Health Policy Vignette*, 2020).

Although the IECMH system of care relies heavily on outside grants, the Alabama legislature has demonstrated its willingness to fund other early childhood initiatives. In May 2021, the Alabama legislature increased First Class Pre-K to \$151 million, which funded 135 additional classrooms (Alabama Department of Early Childhood Education, 2021). It also increased First Teacher funding from \$3,135,000 to \$5,000,000 in the FY2022 budget.

This discrepancy in funding is likely due to differences in data availability. Because First Class Pre-K and First Teacher serve thousands of families, collecting data on program effectiveness is easier. First Class Pre-K enrollment is linked to higher math and reading proficiency (Alabama Department of Early Childhood Education, 2021). After enrolling in First Teacher, mothers were more likely to receive early prenatal care (Alabama Department of Early Childhood Education & University of Alabama at Birmingham

School of Public Health, 2017). Concrete positive outcomes allow the legislature to feel comfortable investing in these programs.

Given the recency of IECMHC and the lack of workforce, limited data can be provided to show the program's effectiveness and persuade the legislature. Yet legislative funding for IECMH programming is critical to the development of IECMH system of care infrastructure (Andujar et al., n.d.). An additional \$500,000 in legislative funding would allow ADECE to expand IECMH to remote low-SES counties, improving program parity and ensuring every child has a healthy start.

ALABAMA IECMH SYSTEM OF CARE

IECMHC

IECMHC partners mental health consultants with early childhood professionals and families in the different settings where they learn and grow, such as childcare, preschool, and their home.

IECMHCs consult with:		Through First Class Pre-K, IECMHCs have improved the lives of over 20,000 4 year olds
ADMH <ul style="list-style-type: none">First Class Pre-KEarly InterventionAletheia HouseRural pediatric practices enrolled in PATHS	ADHR <ul style="list-style-type: none">Licensed childcare programs	Community Action Partners of North Alabama <ul style="list-style-type: none">Early Head StartHead Start

FIRST CLASS PRE-K

First Class Pre-K is a state-funded voluntary preschool for 4 year olds provided by ADECE.



ALABAMA EARLY INTERVENTION SYSTEM (AEIS)

Led by the Alabama Department of Rehabilitation Services and in accordance with IDEA Part C, AEIS offers evaluations and services for **children ages birth to 3 years old with developmental delays**, meaning they are 25 percent below expected growth benchmarks.

7,471

children received EI services in 2019

Once a child is diagnosed, caregivers and service providers develop and **Individualized Family Service Plan (IFSP)** to identify necessary support services

ISFP services may include:



Physical Therapy



Home Visits



Social Work

FIRST TEACHER HOME VISITING

First Teacher provides Nurse-Family Partnerships (NFP), Home Instruction for Parents of Preschool Youngsters (HIPPY), and Parents as Teachers (PAT), which pairs parent educators for at-risk families.

First Teacher improves:



School Readiness



Mother and infant health outcomes

First Teacher served

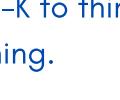
3,485

families in 2020

First Teacher reduces:



Child abuse and neglect cases



Child injuries and ER visits

STRONG START, STRONG FINISH INITIATIVE

The Strong Start, Strong Finish Initiative is a Pre-K to third grade integrated approach to early learning.

Strong Start, Strong Finish serves:

5,572

181

20

children

classrooms

school districts

90%

of enrolled students meet expectations by the end of the year

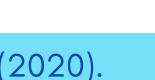
Gets positive feedback from:



Leaders



Teachers



Families

Alabama Department of Mental Health, & Alabama Department of Early Childhood Education. (2020).

Alabama's Infant and Early Childhood Mental Health System of Care.

Alabama Partnership for Children. (2013). Alabama's Early Intervention System.

https://alabamapartnershipforchildren.org/wp-content/uploads/2016/12/ei_faqs0313-1-1.pdf

Cooper, B., & First Class Pre-K Research Evaluation Team. (2021). Outcomes and Impacts: A Summary of Results. Alabama Department of Early Childhood Education.

VOICES for Alabama Children. (2020). Alabama Kids Count Data Book. https://alavoices.org/wp-content/uploads/2020/12/2020_KKDB_Web.pdf

Alabama IECMH System of Care Timeline



2014

Alabama awarded SAMHSA grant for Project LAUNCH.

2016

IECMH state coordinator is created within ADECE.

2019

- APC hires the first cohort of 6 IECMHCs with ADHR funding to serve licensed early care centers.
- Office of Infant and Early Childhood programs established within ADMH.
- Chairman of the House Ways and Means Committee proposes support of IECMH programs within the Office of Infant and Early Childhood Programs through the FY20 Education Trust Fund.
- ADECE was awarded \$10.6 million through the PDGB-5 grant for IECMH workforce development.

2015

The first IECMHC is hired to develop the pilot program for Early Intervention, Home Visiting, First Class Pre-K, and Early Care Settings.

2017

Alabama Partnership for Children receives W. K. Kellogg funding to launch Office of Infant and Early Childhood Programs.

2020

ADMH hires 8 additional IECMHCs to serve First Class Pre-K.

2021

- APC increases IECMHCs from 6 to 10.
- DMH expands IECMHC services to EI and the special women's substance use disorder program.

EVIDENCE REVIEW

This evidence review analyzes (a) what makes messaging memorable, (b) public awareness of IECMH, (c) existing early childhood messaging, and (d) IECMH awareness and programming initiatives in other states. Implementing these findings into the creation and rollout of an Alabama IECMH awareness will ensure that the campaign is evidence-based and appeals to Alabamians.

MAKE IDEAS STICK

For a messaging campaign to be effective, its message must be memorable, or sticky. Ideas are sticky when they use SUCCES: simplicity, unexpectedness, concreteness, credibility, emotions, and stories. Renowned researchers and authors Chip and Dan Heath coined SUCCES in their New York Times bestseller *Made to Stick: Why Some Ideas Thrive and Others Die*. Although a memorable campaign does not need to employ all these principles, all these principles can make a messaging campaign stick (Heath & Heath, 2008).

Simplicity

Simplicity means stripping an idea down to its core message. Simplicity does not just mean brevity. If an idea is short but not profound, then people will not remember it. The ideal simple idea is like a proverb, short and memorable (Heath & Heath, 2008).

Overwhelming audiences with evidence can reduce a campaign's effectiveness. If audiences are presented with many pieces of evidence to back an argument, weaker pieces of evidence undermine the strength of the argument (Farrow et al., 2018; Shu & Carlson, 2014; Weaver et al., 2012; Weaver et al., 2014).

COVID-19 messaging campaign hashtags, such as #flattenthecurve and #savelives, employed simplicity. These hashtags are pithy and to the point: citizens must be COVID-safe to save others (Yeoli & Rand, 2020).

Unexpectedness

Violating people's expectations captures their attention. Surprise may capture people's attention in the short-run, but interest and curiosity maintain it. To generate interest, an idea can target a gap in the audience's knowledge and then fill the gap (Heath & Heath, 2008).

For example, a Center for Science in the Public Interest (CSPI) messaging campaign informed consumers that a medium bucket of movie theater popcorn has more artery clogging fat than a bacon-and-eggs-breakfast, Big Mac lunch, and steak with all the trimmings dinner combined. This comparison caught the public off guard:

how could one snack be unhealthier than three greasy meals? Following CSPI's surprising announcement, movie theater popcorn sales plummeted (Heath & Heath, 2008).

Concreteness

Messages are concrete when they use sensory information and familiar human actions. When a concept is not clearly defined, audience members may employ different definitions and miss the core message. For example, "keep the kitchen clean" has different meanings to different people, while "do the dishes" is a clear expectation. Using concrete language keeps the audience on the same page (Heath & Heath, 2008; Yeoli & Rand, 2020).

During the pandemic, states often failed to make their social distancing messaging concrete. Citizens were unclear when they could and could not leave the house, leading to variance in public adherence to safety measures (Yeoli & Rand, 2020).

Credibility

Credible ideas assuage people's skepticism. Allowing the audience to test an idea for themselves increases buy-in. Take Ronald Reagan's famous question, "are you better off today than you were four years ago". Instead of rattling off statistics about the economy, Reagan let voters judge the economy themselves (Heath & Heath, 2008).

Emotions

People care more about an idea when it makes them feel something. For example, a randomized control trial found that describing the health impacts of their pollution on their community (e.g., childhood asthma and cancer) decreased resident energy usage (Asensio & Delmas, 2015). Households receiving community health impact messaging saw an 8 percent increase in energy savings compared to the control group. Tying pollution to childhood disease evoked guilt and shame, especially among families with children, which saw a 19 percent increase in energy savings. However, Asensio & Delmas (2015) did not study whether these behavioral changes continued once the study ended, making it unclear whether these changes were long term.

In general, audiences emotionally connect more to individual people than groups (Farrow et al., 2018; Heath & Heath, 2008; Hsu, 2007; Lewinsohn-Zamir et al., 2017; Lunt, 2016). The more information audiences have on an individual, the more said individual's story influences their behavior (Hsu, 2007).

For example, in 2016, a photo of Omran Daqneesh, a young Syrian boy and bomb victim, went viral (Narayan, 2016). Following the widespread coverage of Omran's picture, donations to Syrian relief funds briefly spiked (Lunt, 2016). Although the

violence in Syria was well documented prior to this photo, Omran tugged on the heartstrings of millions.

On the flip side, groups are abstract and lack concreteness, making them harder to identify and empathize with (Farrow et al., 2018; Heath & Heath, 2008; Hsu, 2007; Lewinsohn-Zamir et al., 2017; Lunt, 2016). For example, the more victims a crime has, the less severe people perceive the crime (Nordgren & McDonnell, 2010).

In an IECMH context, testimonials may be a strong source of emotion. Hearing a success story of a child helped by an IECMHC makes consultation personal and powerful. Finding testimonials within legislators' districts make the story more salient to them, furthering the emotional appeal. Additionally, many legislators are parents or grandparents. Remind them that first and foremost, IECMH affects families. When looking for potential supporters of IECMH programming, inform legislators that their support makes them a "champion for young children".

Stories

Stories capture audiences' attention and inspire action. (Heath & Heath, 2008). Messaging campaigns using narrative communication allow for perspective-taking and increase audience empathy (Kumble, 2021).

Take the kidney heist story: a beautiful woman buys a man a drink at a bar; the man wakes up the next day, drugged, in a bathtub full of ice, missing a kidney. Although this urban legend has been debunked, the story entralls the audience (Heath & Heath, 2008).

Stickiness Pitfall: The Curse of Knowledge

The curse of knowledge occurs when we assume others have the same background knowledge we do on a topic. Once we know something, it is difficult to imagine not having said knowledge. This impedes our ability to explain something we are knowledgeable about to novices (Heath & Heath, 2008; The Decision Lab, 2021). When messaging, be cognizant of information imbalances between the experts and the intended audience.

This means any messaging strategy ADECE employs must start by clearly defining IECMH and the work IEMHCs do. Avoid using jargon. Simple accessible language will strengthen the pitch for IECMH.

Research Limitations

It is important to note that there may be selection bias in the available data on messaging campaigns and sticky ideas. Academic research is typically only published when the results are statistically significant, meaning that successful implementations

of sticky ideas are more likely to be reported on than unsuccessful attempts. Yet unsuccessful messaging campaigns may also employ the sticky idea framework or have other interesting lessons to share.

Additionally, these campaigns are geared towards the public, not legislators. Although these strategies may entice legislators to care about IECMH, there is no evidence suggesting whether they will influence state budgets.

PUBLIC AWARENESS

To develop its messaging campaign, ADECE needs to know the public's baseline knowledge and perceptions of IECMH.

In general, Americans believe early childhood has long-term impacts on growth and development. A 2015 national voter survey found that 91 percent of respondents "agree that a positive ECE experience lays the foundation for all of the years of education that follow" (Public Opinion Strategies & Hart Research Associates, 2015). A 2009 voter poll found that 61 percent of respondents demonstrated "high levels of interest" in early childhood development (Heckman Equation, 2009).

In 2017, PerryUndem et al. interviewed 1,051 voters for a national survey on voter awareness and opinions on emotional development of children ages birth to three years old. The margin of error for the survey findings was ± 3.3 percentage points. Below are the values the majority of respondents considered "important":

- Parents having resources that help them to be aware of their children's emotional development (97%)
- Society supporting the healthy emotional development of children ages 3 and younger (96%)
- Early childhood brain development (93%)

The majority of respondents agreed that:

- Emotional milestones and physical milestones are equally important (95%)
- Early childhood experiences can impact long-term mental health (85%)

In April 2021, Hart Research Associates & Echelon Insights conducted an online survey for Pritzker Children's Institute and the National Center for Infants & Toddlers that sampled 1,625 policy influencers nationwide on their attitudes towards the prenatal to three policy (PN3) agenda. A policy influencer is defined as "a highly engaged citizen who regularly consumes news, has an interest in current events, and is politically involved in some way" (Think Babies & National Collaborative for Infants & Toddlers, 2021). Policy influencers can be used as stand-ins to assess the perspectives of political leaders.

Hart Research Associates & Echelon Insights (2021) found that 76 percent of policy influencers consider early childhood “extremely important to long-term mental and emotional health and development” and 74 percent considered early childhood “extremely important to long-term physical health”. The margin of error is ±2.9 percentage points (Hart Research Associates & Echelon Insights, 2021).

Public interest and support of IECMH varies by age, sex, race, and political party. According to Hart Research Associates & Echelon Insights (2021), women under age 50 were more likely to consider the long-term effects of early childhood “extremely important”, while men who did not attend college were less likely. There were no response differences by race or partisan group (Hart Research Associates & Echelon Insights, 2021). Hart Research Associates & Echelon Insights (2021) also found that Republicans were less likely to consider PN3 policies or programming important, while respondents who were Democrats, women, Black, Hispanic, AAPI, from urban areas, had kids under 18, or had an income under \$40k were more likely.

Research shows that the public supports IECMH programming. Hart Research Associates & Echelon Insights (2021) found that programming supporting infant and toddler mental and physical health was most popular, with 89 percent of policy influencers considering it “extremely important” or “very important”. A 2017 national voter poll found that 76 percent of respondents were in favor of “voluntary home visiting and parent education programs that help first-time parents support their child's early learning, health, and emotional development” (Public Opinion Strategies & Hart Research Associates, 2017).

EARLY CHILDHOOD MESSAGING

Along with gauging public awareness, the PerryUndem et al. (2017) and Hart Research Associates & Echelon Insights (2021) surveys tested early childhood development messages. See the appendix for a full list of the messages tested.

Approximately 90 percent of respondents found all five messages tested in the PerryUndem et al. (2017) survey “convincing”. The message below was the most effective, with 62 percent of respondents rating it “very convincing”:

“Parents and caregivers influence babies’ brain development from the start. As early as 3 months – well before a baby utters his or her first words – babies experience a whole range of emotions like joy, sadness, anger, interest, and excitement. Children who feel loved, comforted, and have the freedom to play form more brain connections, which increases their ability to trust, relate, communicate, and learn.”

Hart Research Associates & Echelon Insights (2021) also found that a brain development message was the most persuasive. Forty-nine percent of policy influencers ranked the brain development message in their top three most effective messages. Respondents who were White, AAPI, from small or rural areas, and those who previously ranked PN3 policies as “somewhat important” all voted the brain development message most effective. The historical equity perspective was ranked most effective among Black respondents (Hart Research Associates & Echelon Insight, 2021).

The success of the Hart Research Associates & Echelon Insights (2021) and PerryUndem et al. (2017) messaging suggests that IECMH messaging may be effective in Alabama. However, PerryUndem et al. (2017) found that Republican respondents had mixed sentiments on government involvement, lessening their support for early childhood policies. This may hinder ADECE’s campaign, given the fact that ADECE is a government agency and Alabama is majority Republican (United States Census Bureau, 2018).

When analyzing pre and post survey opinions, PerryUndem et al. (2017) observed a 13 percentage point decrease in the number of respondents who reported societal support of early childhood policies as “very important”. The same trend occurred in the Hart Research Associates & Echelon Insights (2021) survey, which saw 6 percentage point decrease in the number of respondents who considered PN3 policies “very important” post survey. This indicates that exposure to early childhood messaging may decrease public enthusiasm for early childhood policies. However, most PerryUndem et al. (2017) respondents who changed their answer still considered early childhood social support “important”. The researchers chalked up the response differences to apprehension about government involvement (PerryUndem et al., 2017).

IECMH IN OTHER STATES

Other states have successfully implemented IECMH messaging strategies and programming. New Mexico, South Carolina, Tennessee, Alaska, Colorado, Minnesota, and Oregon have all made strides to implement statewide IECMH policy and programming in the past two decades (*Alaska Infant and Early Childhood Mental Health Policy Vignette*, 2020; *Colorado Infant and Early Childhood Mental Health Policy Vignette*, 2020; *Minnesota Infant and Early Childhood Mental Health Policy Vignette*, 2020; *Oregon Infant and Early Childhood Mental Health Policy Vignette*, 2020; *South Carolina Infant and Early Childhood Mental Health Policy Vignette*, 2020; *Tennessee Infant and Early Childhood Mental Health Policy Vignette*, 2020). These states realized their goals by collaborating across state agencies, raising statewide awareness, and educating state legislators.

New Mexico started its IECMH journey around the same time Alabama did. In 2012, Soledad Martinez, who worked at New Mexico Children, Youth, & Families Department (CYFD), started raising state awareness of IECMH. By 2018, New Mexico participated in the ZERO TO THREE IECMH Financing Policy Project meeting, sparking conversations about IECMH action in New Mexico. Following the meeting, the New Mexico team established cross-agency subcommittees to examine potential policies to implement a statewide IECMH agenda. In 2019, New Mexico started an official CYFD infant mental health department. CYFD then received a \$1 million increase to their budget in the 2020 state budget (*New Mexico Infant and Early Childhood Mental Health Policy Vignette*, 2020).

Other states needed to shift mindsets and brief policymakers in order to get buy-in for state-wide programming. In Minnesota, the Minnesota chapter of the National Alliance for Mental Illness (NAMI) and a University of Minnesota professor Jane Kretzmann teamed up to bridge research and policy on IECMH. Kretzmann raised awareness among policymakers about ACEs. NAMI had strong ties to certain state legislators, allowing them to provide policy recommendations. A public-private action group of over 3,000 people was even formed to point out mental health policy needs, demonstrating the statewide call for IECMH programming (*Minnesota Infant and Early Childhood Mental Health Policy Vignette*, 2020).

Like Alabama, South Carolina experienced an IECMH workforce deficit. South Carolina received funding for IECMH professional development through private philanthropy and public grants, including Project LAUNCH. To raise awareness from the top-down, Ann-Marie Dwyer, the Director of Behavioral Health at the South Carolina Department of Health and Human Services, had department leadership undergo ACE training (*South Carolina Infant and Early Childhood Mental Health Policy Vignette*, 2020).

EVALUATIVE CRITERIA

The criteria below are used to evaluate the strength and rigor of potential themes for the ADECE messaging campaign. The themes would be used to develop core messages and language stressing the importance of IECMH.

STRENGTH OF EVIDENCE

Strength of evidence assesses whether existing research suggests the messaging campaign theme would be successful in Alabama. What were the documented effects of the messaging campaign theme on public knowledge and interest? Is the evidence generalizable? Was the research sample comparable to Alabama's population?

Strength of evidence will be scored on a scale of low, medium, and high, with high being the best score. A low score means there is little research on the messaging theme or available research does not conclusively suggest the theme is effective. A medium score means research suggests the messaging theme is effective, but it may not be generalizable to Alabama. A high score means the message is supported by research and generalizable to Alabama.

FILLING A GAP

An effective messaging campaign educates the target audience on a topic they were previously uninformed about. Filling the gap looks at whether the message is (a) addressing an IECMH information gap and (b) whether Alabamans are interested in having the information gap filled. It is hard to educate people if they do not want to learn.

Filling a gap will be measured on a scale of low, medium, and high, with high being the best score. Low means the public is not interested in the topic *and* feels it knows about the topic. Medium means (a) the public is interested in the topic *or* (b) the public feels it does not know enough about the topic. High means the public is interested in the topic *and* feels it does not know enough about the topic.

POLITICAL FEASIBILITY

Political feasibility is defined by whether an alternative is politically polarizing and has partisan associations. ADECE is a state government agency, so any messaging campaign it develops must be nonpartisan to be considered ethical.

Political feasibility will be measured on a scale of low or high, with low meaning partisan and high meaning nonpartisan. A message alternative scores low if the majority of Democratic voters agree with it and the majority of Republican voters do not or vice

versa. A message alternative scores high if the majority of both parties agree or disagree with it.

MESSAGING CAMPAIGN THEMES

After evaluating existing research on early childhood messaging, I drafted four potential messaging campaign themes: (a) importance of early childhood brain development, (b) COVID-driven increases in IECMH demands, (c) long-term effects of childhood trauma, and (d) economic returns of early childhood intervention. The messaging campaign themes would be used to develop media messaging and language.

After evaluating each theme on strength of evidence, ability to fill a gap, and political feasibility, I identified the importance of early childhood brain development as the most effective messaging campaign theme. Research shows that individuals, regardless of political party, recognize the importance of early childhood brain development. Brain development messaging consistently outperformed other messaging approaches in both the PerryUndem et al. (2017) and Hart Research Associates & Echelon Insights (2021) surveys. Additionally, the public is both interested and uninformed about early childhood brain development. Given these findings, a brain development messaging campaign has the potential to convince Alabamans to prioritize IECMH and encourage their legislators to do the same.

THEME 1: EARLY CHILDHOOD BRAIN DEVELOPMENT

This alternative emphasizes the importance of early childhood intervention by discussing the immense brain development children experience from birth to five years old. Ninety percent of brain development occurs in the first five years of life (*Brain Development*, 2019). Early childhood experiences shape their brain development and build the foundation of their long-term emotional, physical, and social health.

Strength of Evidence

Hart Research Associates & Echelon Insights (2021) found that policy influencers considered messaging around brain development to be the most convincing argument for PN3 policies. When you break the results down by demographics, brain development was ranked most convincing by respondents who were White, Southern, and those who had previously ranked early childhood policies as “somewhat important”.

Additionally, 52 percent of surveyed policy influencers found messaging about early childhood neural connections to be the most effective supplementary fact in support of PN3 policies, with Republican and White respondents both ranking neural connections as the most convincing proof point (Hart Research Associates & Echelon Insights,

2021). Alabama is a Southern state that is 69.1 percent White and majority Republican, so messaging that appeals to Southern, White and Republican audiences is likely to be effective in Alabama (United States Census Bureau, 2018).

A messaging campaign is supposed to inform or convince those not currently aware or in support of the message. Hart Research Associates & Echelon Insights (2021) found that policy influencers who previously ranked PN3 policies as somewhat, less, or not important ranked early childhood neural connections as the most convincing supplementary fact in support of early childhood policies. This implies that brain development messaging may be an effective way to persuade those currently not concerned about early childhood emotional development to care more.

Given the consistent success of brain development messaging and its applicability to Alabama's population, this alternative is ranked **high** in strength of evidence.

Filling a Gap

Filling the gap evaluates whether a message fills an IECMH information gap that the public is interested in learning about. Voters recognize the importance of early childhood brain development but are currently uninformed. The PerryUndem et al. (2017) national survey found that although 93 percent of voters agree that it is important to understand early childhood brain development, 50 percent reported knowing little or nothing about early childhood brain development.

Given the public's value, curiosity, and lack of knowledge on brain development, this alternative ranks **high** in filling a gap.

Political Feasibility

Republicans are generally less likely to be in support of the early childhood development agenda (PerryUndem et al., 2017). However, almost every surveyed voter in the PerryUndem et al. (2017) survey stated the importance of early childhood brain development and Hart Research Associates & Echelon Insights (2021) found that brain development messaging was the most convincing message overall, implying that brain development messaging elicits bipartisan support. Given this evidence, this alternative is ranked **high** in political feasibility.

THEME 2: COVID-DRIVEN INCREASES IN IECMH DEMANDS

This messaging strategy would focus on how the pandemic has increased the prevalence of emotional development issues among children ages birth to five years old, along with caregiver stress (RAPID-EC, 2022; Barnett & Jung, 2021). Stress inhibits caregivers' ability to attend to their children's social and emotional development (Alabama Department of Mental Health & Alabama Department of Early Childhood Education,

2020). Messaging materials would illustrate that the increases in IECMH issues and caregiver stress make IECMH an urgent issue.

Strength of Evidence

Of the reasons for focusing on early childhood emotional development tested in the PerryUndem et al. (2017) survey, the two discussing how parents' emotions impact their children's emotional development were rated the most convincing, at 91 and 92 percent. This suggests that voters would be responsive to a message discussing parent stress and its impact on children. However, the PerryUndem et al. (2017) survey is nationwide and Alabamians may not hold the same opinions as the survey respondents.

COVID messaging around parental stress does not resonate as strongly with policymakers. Hart Research Associates & Echelon Insights (2021) found that a COVID-centered argument for early childhood policies was the least convincing of the ten arguments offered, with only 31 percent of policy influencers considering it the most convincing argument of ten arguments. In comparison, the most effective messaging strategy was voted most convincing by 49 percent of policy influencers (Hart Research Associates & Echelon Insights, 2021). Note that only half of the sample was provided with the COVID-centered argument in the list of arguments to choose from (Think Babies & National Collaborative for Infants & Toddlers, 2021). This lessens the representativeness of the finding and limits generalizability. The survey also found that respondents did not consider the “strengthening of families and communities as we recover from the pandemic and economic crisis” a compelling outcome for PN3 programming, with only 29 percent of respondents ranking the outcome “most important”.

Given the mixed success of messaging on COVID impacts on early childhood emotional development and caregiver stress, this alternative is ranked **low** for strength of evidence.

Filling a Gap

Given the recency of the pandemic, limited data is available on public awareness of COVID-related early childhood emotional development concerns. However, there is evidence that the subject concerns the public. Almost 90 percent of parents of young children report worrying that their child's cognitive and social-emotional development will be negatively impacted by the pandemic (Lankes, 2021). PerryUndem et al. (2017) also found that 78 percent of surveyed voters agreed that “all parents are overwhelmed in the first few months with the baby”, implying that voters acknowledge caregiver stress. Given the limited data on awareness but evidence of public curiosity, this alternative is ranked **medium** in filling a gap.

Political Feasibility

COVID has become a politicized topic. Two national studies found that liberals are more likely to be concerned about COVID-19 than conservatives, more likely to trust science experts about COVID-19 than conservatives, and more likely to be critical of government response than conservatives (Kerr et al., 2021). Given the political connotations associated with COVID, this alternative scores **low** in political feasibility.

THEME 3: LONG-TERM EFFECTS OF EARLY TRAUMA

This alternative will message around how adverse early childhood experiences (e.g., neglect, exposure to violence, poverty) affect children later in life. People who experience childhood trauma are at higher risk for chronic mental and physical illnesses, lower educational attainment, and decreased earnings (CDC, 2021). This message explains that early childhood intervention is the key to mitigating negative social, emotional, and physical outcomes in adulthood.

Strength of Evidence

The Hart Research Associates & Echelon Insights (2021) national survey found that respondents who previously ranked PN3 policies as somewhat, less, or not important and ranked “improved physical health for children throughout their lives” as the most effective outcome of PN3 programming. If those who do not consider early childhood development a policy priority care about long-term physical impacts of early childhood, then perhaps a messaging campaign on long-term impacts could convince them to reassess their policy priorities.

Hart Research Associates & Echelon Insights (2021) tested a general body health and a specific body health message. Both messages explained (a) how positive PN3 experiences promote healthy physical development and (b) that negative early childhood experiences are associated with poor mental and physical health outcomes later in life. The general body health message said, “positive experiences early in children’s lives promote healthy physical development throughout the body,” while specific body health message added “including the brain, the heart and lungs, the systems that turn food into energy, and the immune system” (Think Babies & National Collaborative for Infants & Toddlers, 2021).

Across the entire surveyed sample, the specific body health message and general body health message were ranked fourth and ninth most convincing of the ten tested messages, respectively. However, Republicans found the specific fully body health message most convincing and respondents that previously ranked PN3 policies as less or not important ranked both the full and specific fully body health messages most convincing. Given that Alabama is a majority Republican state and the goal of the

messaging campaign is to appeal to those who currently do not prioritize IECMH, these findings suggest that messaging on long-term health effects would be effective.

This alternative ranks **medium** in strength of evidence. There are mixed findings on the general success of long-term outcome messaging; however, the message was effective among samples similar to Alabama's population.

Filling a Gap

The PerryUndem et al. (2017) national voter awareness survey on early childhood emotional development found that 85 percent of surveyed voters agree that "experiences in the first three years of life can lead to mental health issues later in life". 78 percent of surveyed voters thought experiencing trauma has a "big impact" on early childhood emotional development. Out of 520 surveyed voters, 83 percent agreed that "emotional trauma that a child age 3 or younger experiences can lead to long-term problems like depression or Attention Deficit Hyperactivity Disorder (ADHD)" (PerryUndem et al., 2017). This suggests that voters are aware of the long-term effects of childhood trauma.

Policy influencers are also aware of the long-term impacts of early childhood experiences. Hart Research Associates & Echelon Insights (2021) found that 76 percent of surveyed policy influences said the PN3 period was extremely important to long-term mental and emotional health and development. 74 percent thought the PN3 period was very important to long-term physical health.

However, voters are split on what qualifies as trauma. Only 36 percent of surveyed voters in the PerryUndem et al. (2017) survey believed children six months or younger were affected by witnessing repeated violence. Voters need information on what kinds of trauma impact children and at what age.

In short, the public knows that early childhood experiences have important consequences for long-term outcomes but are unclear on what experiences influence said consequences. This alternative ranks **high** in filling the gap because the public values the topic, but still has more to learn.

Political Feasibility

There were no differences in importance of the long-term impacts of PN3 across race or partisan groups, suggesting that long-term impacts are a nonpartisan issue (Hart Research Associates & Echelon Insights, 2021). Given the lack of partisan disparities, this alternative ranks **high** in political feasibility.

THEME 4: ECONOMIC RETURNS OF EARLY INVESTMENT

Investing in early childhood social and cognitive development could reduce a child's likelihood to need special education services or be part of the criminal justice system, reducing taxpayer education and the criminal justice system expenditures (Executive Office of the President of the United States, 2014). This alternative explains how prioritizing IECMH care saves taxpayer dollars down the road. For every dollar spent on early childhood programming, taxpayers receive a \$4-\$9 return on investment (Guevara, 2022).

Strength of Evidence

Hart Research Associates & Echelon Insights (2021) found that surveyed political influencers did not consider "sav[ing] taxpayer money by reducing spending needed in other areas: physical/mental healthcare, remedial education, and incarceration" a compelling outcome for PN3 policies, with only 24 percent of respondents ranking the outcome "most important".

The survey also found that only 36 percent of respondents considered the \$3.02 emergency health cost savings associated with every dollar put towards PN3 policies to be "very convincing" evidence for PN3 policies, as opposed to the 52 percent who considered early childhood neural connection development "very convincing". Other evidence on economic returns fared slightly better, such the \$4-\$9 return on investment associated with high quality early childhood programs (44 percent) or the GDP boost associated with women's labor force participation when childcare is invested in (37 percent) (Hart Research Associates & Echelon Insights, 2021).

These findings suggest that messaging on the economic returns of early investment is not an effective avenue to spark interest in IECMH, making this alternative **low** in strength of evidence.

Filling a Gap

A 2015 poll from the National Association for the Education of Young Children found almost 80 percent of surveyed voters believed that early childhood investment created economic opportunities and combated poverty (Fairbank, Maslin, Maullin, Metz & Associates & Public Opinion Strategies, 2018). Research from 2009 on the Heckman Equation found that the majority of voters believed early childhood investment contributed to a better economic tomorrow (Artemis Strategy Group, 2009). This research suggests that although the public is interested in the economic benefits of early childhood investment, they are already aware. For this reason, this alternative is ranked **medium** for filling a gap.

Political Feasibility

An argument about cost saving may appeal more to Republicans, who are generally more concerned about government spending (Pew Research Center, 2019). Democrats are already more likely to support the early childhood agenda, yet Republicans are more hesitant (Hart Research Associates & Echelon Insights, 2021; PerryUndem et al., 2017). With that in mind, this alternative is ranked **high** in political feasibility.

OUTCOMES MATRIX

	<i>Strength of Evidence:</i>	<i>Filling a Gap:</i>	<i>Political Feasibility:</i>
COVID-driven increases in IECMH demands	Low	Medium	Low
Importance of early childhood brain development	High	High	High
Long-term health effects of early childhood experiences	High	Medium	High
Economic returns of early investment	Low	Low	High

IMPLEMENTATION

FUNDING

ADECE can finance the messaging by submitting a proposal to receive funds from the American Rescue Plan Act (ARPA). The proposal would emphasize how the pandemic has increased the number of children ages birth to five years old with emotional development issues (RAPID-EC, 2022; Barnett & Jung, 2021). It would also discuss how COVID-19 has increased the level of stress caregivers of children ages birth to five years old (RAPID-EC, 2022; Barnett & Jung, 2021). All the grants below are included in ARPA.

National Child Traumatic Stress Initiative (NCTSI), Category III, Community Service Treatment (CST) Centers Grant

Provided through SAMHSA, the NCTSI, Category III, CST Center grant offers funding to initiatives that “expand trauma treatment and care for children, youth, and their families” (Johnson-Staub & Weerasinghe, 2021). ADECE can emphasize how a messaging campaign promoting IECMH awareness enables more Alabamians to know of and seek out services for ACEs. SAMHSA encourages programming related to ACEs, so this pitch aligns with SAMHSA values (Coderre, 2021).

Supplements to the Community Mental Health Services Block Grant (MHBG)

MHBG is a SAMHSA grant that finances “comprehensive, community based mental health services to children and adults” (Johnson-Staub & Weerasinghe, 2021). Given that the goal of ADECE’s messaging campaign is to increase funding for and awareness of IECMHC, ADECE may be able to receive funding from MHBG.

Child Care Stabilization Grants

Child care stabilization grants are used to motivate providers to allocate a portion of their funding towards professional development on trauma-informed care and child mental health (Johnson-Staub & Weerasinghe, 2021). ADECE can explain how the messaging campaign is aimed at increasing funding for IECMH workforce development.

MEMORABILITY OF MESSAGING

For a messaging campaign to be effective, its message must be memorable, or sticky. Ideas are sticky when they use SUCCES:

- *Simplicity* – stripping an idea down to its core message
- *Unexpectedness* – surprise the audience and generate curiosity
- *Concreteness* – clearly define ideas
- *Credibility* – allow the audience to test an idea for themselves

- *Emotions* – make the audience emotionally connect to the material
- *Stories* – tell a story

Although a memorable campaign does not need to employ all these principles, each of these principles can make a messaging campaign stick (Heath & Heath, 2008). I recommend that ADECE factor these tactics into their messaging campaign.

One way to employ SUCCES is to use case studies. Audiences emotionally connect more to individual people than groups (Farrow et al., 2018; Heath & Heath, 2008; Hsu, 2007; Lewinsohn-Zamir et al., 2017; Lunt, 2016). Pick one child and tell their story. Show how their brain develops in their first five years of life and how this will affect their future. This puts a name and face to infant and early childhood mental health, making it personal and concrete.

Another way to make the messaging campaign concrete is to clearly and simply define what infant and early childhood is. Adujar et al. recommend “providing clear definitions, key concepts, and guiding principles” to define IECMH and increase its workforce. The first step is using a term the public can understand and connect to. A national study surveying voters’ attitudes on early childhood emotional development found that when given eight terms to choose from, voters preferred referring to IECMH as “healthy social and emotional development in infants and toddlers”, so I recommend using that terminology. Surveyed voters did not respond as well to terminology referencing “mental health”, so stray away from including that word when developing language for the campaign (PerryUndem et al., 2017).

MEDIA ELEMENTS

Messaging campaigns can include television ads, website banners, billboards, social media posts, and more. Messaging campaigns promoted on the CDC website include videos, posters, handouts, infographics, and social media sample posts (*Featured Campaigns*, 2019). The question is, which media elements are most effective? Deloitte conducted interviews nationwide with public health communication specialists and found that digital campaigns allow for targeted outreach, real time feedback on engagement, and cost less than television and national broadcasts ads (Krawiec et al., 2021). However, a 2016 metaanalysis of public health campaigns using social media found no evidence that social media focused campaigns were more effective than traditional media campaigns (Shi et al., 2016). A study of a statewide public health campaign promoting teenage physical fitness in Delaware found that billboards were the most cost effective, but exposure to both billboards and television ads had the largest impact on physical activity intent and action among teens.

According to Verizon, Alabama is among the top ten states that watch the most television, with Alabamians consuming approximately 3.5 hours a day (Harvey, 2019). Eighty-one percent of Americans use YouTube and 69 percent use Facebook (Pew Research Center, 2021). In comparison, 40 percent or less used all other social media sites. Given this information, I recommend Alabama allocate more funding towards ads on YouTube, Facebook, and TV.

REFERENCES

Alabama Children's Trust Fund. (2018). *ADVERSE CHILD EXPERIENCES (ACES) FACT SHEET IN ALABAMA.*

<https://ctf.alabama.gov/wp-content/uploads/2019/05/ACES-Fact-Sheet-3-26-19.pdf>

Alabama Department of Early Childhood Education. (2019, November 1). *PDG B-5 Renewal Application.*

<https://children.alabama.gov/wp-content/uploads/2021/09/22.-Educators-Preschool-Development-Grant-Alabamas-PDG-B-5-Renewal.pdf>

Alabama Department of Early Childhood Education. (2020). *Alabama's MIECHV Program FY 2019.*

<https://children.alabama.gov/wp-content/uploads/2020/05/2019-HRSA-MIECHV-Program-Sheet-AL.pdf>

Alabama Department of Early Childhood Education, & University of Alabama at Birmingham School of Public Health. (2017). *Alabama's First Teacher Program Works to Prevent and Reduce Infant Mortality in Alabama.*

<https://children.alabama.gov/wp-content/uploads/2018/04/Home-Visiting-Programs-Impact-on-Infant-Mortality-Information-Sheet.pdf>

Alabama Department of Mental Health, & Alabama Department of Early Childhood Education. (2020). *Alabama's Infant and Early Childhood Mental Health System of Care.*

Alabama Infant and Early Childhood Mental Health Policy Vignette. (2020). ZERO TO THREE.

<https://www.zerotothree.org/resources/3162-alabama-infant-and-early-childhood-mental-health-policy-vignette>

Alaska Infant and Early Childhood Mental Health Policy Vignette. (2020). ZERO to THREE.

<https://www.zerotothree.org/resources/2769-alaska-infant-and-early-childhood-mental-health-policy-vignette>

Andujar, P., Aytch, L., Blanck, E., Chacon, J., Chavez, A., Costa, G., Driver, M., Forbes, D., Gilsdorf, K., Giserman-Kiss, I., Gleason, M. M., Glink, P., Godoy, L., Guyon Harris, K., Heberle, A., Horen, N., Im, J., Ghosh Ippen, C., Johnson III, L., & Kohchi, J. (n.d.). *IECMH Workforce Solution Pathways.* ZERO TO THREE.

Artemis Strategy Group. (2009). *Investing in Early Childhood Development: Voter Survey.*

Unpublished raw data.

Asensio, O. I., & Delmas, M. A. (2015). Nonprice incentives and energy conservation. *Proceedings of the National Academy of Sciences*, 112(6), E510–E515.

<https://doi.org/10.1073/pnas.1401880112>

Barnett, W., & Jung, K. (2021). *Seven Impacts of the Pandemic on Young Children and their Parents: Initial Findings from NIEER's December 2020 Preschool Learning Activities Survey.* National Institute for Early Education Research.

https://nieer.org/wp-content/uploads/2021/02/NIEER_Seven_Impacts_of_the_Pandemic_on_Young_Children_and_their_Parents.pdf

Brain Development. (2019, September 16). First Things First.

<https://www.firstthingsfirst.org/early-childhood-matters/brain-development/>

Brauner, C. B., & Stephens, C. B. (2006). Estimating the Prevalence of Early Childhood Serious Emotional/Behavioral Disorders: Challenges and Recommendations.

Public Health Reports, 121(3), 303–310.

<https://doi.org/10.1177/003335490612100314>

Bureau of Labor Statistics, & US Department of Labor. (2021). *BLS Data Viewer*.

<https://beta.bls.gov/dataViewer/view/timeseries/CES6562440001>

CDC. (2021). *Preventing Adverse Childhood Experiences*.

<https://www.cdc.gov/violenceprevention/aces/fastfact.html>

Center on the Developing Child. (2020, October 30). *What Are ACES? And How Do They Relate to Toxic Stress?* Harvard University.

<https://developingchild.harvard.edu/resources/aces-and-toxic-stress-frequently-asked-questions/>

Colorado Infant and Early Childhood Mental Health Policy Vignette. (2020). ZERO to THREE.

<https://www.zerotothree.org/resources/2770-colorado-infant-and-early-childhood-mental-health-policy-vignette>

Cozolino, L. (2013). Chapter 5. What is the connection between learning and stress? In *The Social Neuroscience of Education: Optimizing Attachment and Learning in the Classroom (The Norton Series on the Social Neuroscience of Education)*. WW Norton & Company.

Fairbank, Maslin, Maullin, Metz & Associates, & Public Opinion Strategies. (2018). *Key Findings from 2015 Opinion Research with Educators, Potential Educators and American Voters*.

https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/our-work/public-policy-advocacy/key_findings_presentation.naeyc_.pdf

Featured Campaigns. (2019). Center for Disease Control.

<https://www.cdc.gov/healthcommunication/campaigns/index.html>

Guevara, H. (2022, January 6). *Examining the Significant Return on Investment from High-Quality Early Learning & Care.* First Five Years Fund.

<https://www.ffyf.org/examining-the-significant-return-on-investment-from-high-quality-early-learning-care/>

Hart Research Associates, & Echelon Insights. (2021). *Promoting a PN-3 Agenda: Key findings from a nationwide survey of policy influencers.*

https://www.thencit.org/sites/default/files/2021-07/PN-3%20Messaging%20Research%20Findings_2021_o.pdf

Harvey, S. (2019, April 3). *Ranking the Most and Least Watched TV by State.* Verizon.

<https://www.verizonspecials.com/resources/tv-most-least-watched/>

Heath, C., & Heath, D. (2008). What Sticks? In *Made To Stick: Why Some Ideas Survive While Others Die.* Random House.

Hsu, S.-L. (2007). *The Identifiability Bias in Environmental Law.* Undefined;

<https://www.semanticscholar.org/paper/The-Identifiability-Bias-in-Environmental-Law-Hsu/bb6341b2930c9b7b605bcd4af475f88ea7973fc1>

Kerr, J., Panagopoulos, C., & van der Linden, S. (2021). Political polarization on COVID-19 pandemic response in the United States. *Personality and Individual Differences, 179, 110892.* <https://doi.org/10.1016/j.paid.2021.110892>

Krawiec, R., McGuire, K., McInerny, J., & Malik, N. (2021, August 18). *The future of public health campaigns.* Deloitte Insights.

<https://www2.deloitte.com/us/en/insights/industry/public-sector/successful-digital-public-health-campaigns.html>

Kumble, S. (2021). Investigating the persuasive effects of narrative communication and categorization on de-stigmatization of mental illness. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 82(4-B)*.

https://web-a-ebscohost-com.proxy01.its.virginia.edu/ehost/detail/detail?vid=5&sid=92401239-a979-4614-a203-4473a39a50f4%40sessionmgr4008&bdata=JN_NpdGU9ZWhvc3QtbGl2ZSzY29wZT1zaXRI#AN=2020-86257-231&db=psyh

Lamont, J., Devore, C., Allison, M., Ancona, R., Barnett, S., Gunther, R., Holmes, B., Minier, M., Okamoto, J., Wheeler, L., & Young, T. (2013). Out-of-School Suspension and Expulsion. *Pediatrics, 131*(3).

<https://doi.org/10.1542/peds.2012-3932>

Lankes, T. (2021, February 12). *Poll: Nearly 9 in 10 parents of infants and toddlers worry their child's social, emotional, and cognitive development will suffer as a result of the ongoing pandemic.* The Education Trust - New York.

<https://newyork.edtrust.org/press-release/poll-nearly-9-in-10-parents-of-infant-s-and-toddlers-worry-their-childs-social-emotional-and-cognitive-development-will-suffer-as-a-result-of-the-ongoing-pandemic/>

Lewinsohn-Zamir, D., Ritov, I., & Kogut, T. (2017). Law and Identifiability. *Indiana Law Journal, 92*(2). <https://www.repository.law.indiana.edu/ilj/vol92/iss2/3/>

Lunt, D. C. (2016). *Willing to Help, but Lacking Discernment: The Effects of Victim Group Size on Donation Behaviors.* Undefined;
<https://www.semanticscholar.org/paper/Willing-to-Help%2C-but-Lacking-Disce>

rnment%3A-The-of-on-Lunt/bd5d50f09b586eb01b64d72d78921da5doe6a1a5#p
aper-header

Mental Health America. (2022). *Ranking the States 2022*.

https://mhanational.org/issues/2022/ranking-states#youth_data

Minnesota Infant and Early Childhood Mental Health Policy Vignette. (2020). ZERO to THREE.

<https://www.zerotothree.org/resources/2773-minnesota-infant-and-early-childhood-mental-health-policy-vignette>

Narayan, C. (2016, August 18). *His name is Omran: The bloodied boy in Syria*. CNN; CNN.

<https://www.cnn.com/2016/08/17/world/syria-little-boy-airstrike-victim/index.html>

New Mexico Infant and Early Childhood Mental Health Policy Vignette. (2020). ZERO to THREE.

<https://www.zerotothree.org/resources/3159-new-mexico-infant-and-early-childhood-mental-health-policy-vignette>

Nordgren, L. F., & McDonnell, M.-H. M. (2010). The Scope-Severity Paradox. *Social Psychological and Personality Science*, 2(1), 97–102.

<https://doi.org/10.1177/1948550610382308>

Oregon Infant and Early Childhood Mental Health Policy Vignette. (2020). ZERO to THREE.

<https://www.zerotothree.org/resources/2774-oregon-infant-and-early-childhood-mental-health-policy-vignette>

PerryUndem, GMMB, ZERO TO THREE, & Robert Wood Johnson Foundation. (2017).

Public Perceptions of Infant Brain Development.

<https://www.rwjf.org/en/library/research/2017/09/public-perceptions-of-infant-brain-development.html>

Petras, H., Masyn, K. E., Buckley, J. A., Ialongo, N. S., & Kellam, S. (2011). Who is most at risk for school removal? A multilevel discrete-time survival analysis of individual- and context-level influences. *Journal of Educational Psychology, 103*(1), 223–237. <https://doi.org/10.1037/a0021545>

Pew Research Center. (2021, April 7). *Demographics of Social Media Users and Adoption in the United States.*

<https://www.pewresearch.org/internet/fact-sheet/social-media/?menuItem=d102dcb7-e8a1-42cd-ao4e-ee442f81505a>

Public Opinion Strategies, & Hart Research Associates. (2015). *National Poll on Early Childhood Education.* Unpublished raw data.

Public Opinion Strategies, & Hart Research Associates. (2017). *National Poll on Early Childhood Education.* Unpublished raw data.

Rabig, D. (2020). *Alabama IECMH System of Care.*

https://www.house.ga.gov/Documents/CommitteeDocuments/2019/Infant_and_Toddler_Social_and_Emotional_Health/Alabama_Model.pdf

RAPID-EC. (2022, March). *Latest Data & Trends.* RAPID-EC.

<https://rapidsurveyproject.com/latest-data-and-trends>

Shi, J., Poorisat, T., & Salmon, C. T. (2016). The Use of Social Networking Sites (SNSs) in Health Communication Campaigns: Review and Recommendations. *Health Communication, 33*(1), 49–56. <https://doi.org/10.1080/10410236.2016.1242035>

- Shu, S. B., & Carlson, K. A. (2014). When Three Charms but Four Alarms: Identifying the Optimal Number of Claims in Persuasion Settings. *Journal of Marketing*, 78(1), 127–139. <https://doi.org/10.1509/jm.11.0504>
- Skiba, R., Reynolds, C. R., Graham, S., Sheras, P., Close Conoley, J., & Garcia-Vazquez, E. (2006). *Are Zero Tolerance Policies Effective in the Schools? An Evidentiary Review and Recommendations*. American Psychological Association.
- South Carolina Infant and Early Childhood Mental Health Policy Vignette*. (2020). ZERO to THREE.
<https://www.zerotothree.org/resources/3160-south-carolina-infant-and-early-childhood-mental-health-policy-vignette>
- Tennessee Infant and Early Childhood Mental Health Policy Vignette*. (2020). ZERO to THREE.
<https://www.zerotothree.org/resources/3161-tennessee-infant-and-early-childhood-mental-health-policy-vignette>
- The Decision Lab. (2021, October 5). *Curse of Knowledge*.
<https://thedecisionlab.com/reference-guide/management/curse-of-knowledge/>
- Think Babies, & National Collaborative for Infants & Toddlers. (2021). *Building Momentum for Prenatal-to-Three Lessons Learned from Message Research*.
https://www.thinkbabies.org/wp-content/uploads/2021/08/Building-Momentum-for-PN-3_Lessons-Learned-from-Message-Research.pdf
- United Health Foundation. (2022). *Explore Mental Health Providers in the United States | 2020 Annual Report*. America's Health Rankings.
<https://www.americashealthrankings.org/explore/annual/measure/MHP>

- United States Census Bureau. (2018). *QuickFacts: Alabama*. United States Census Bureau. <https://www.census.gov/quickfacts/AL>
- Van der Kolk. (2005). Developmental trauma disorder: toward a rational diagnosis for children with complex trauma histories. *Psychiatric Annals*, 35(5), 401–408.
- VOICES for Alabama Children. (2020). *Alabama Kids Count Data Book*.
https://alavoices.org/wp-content/uploads/2020/12/2020_KKDB_Web.pdf
- Weaver, K., Garcia, S. M., & Schwarz, N. (2012). The Presenter's Paradox: Figure 1. *Journal of Consumer Research*, 39(3), 445–460.
<https://doi.org/10.1086/664497>
- Weaver, K., Hock, S. J., & Garcia, S. M. (2014). “Top 10” reasons: When adding persuasive arguments reduces persuasion. *Marketing Letters*, 27(1), 27–38.
<https://doi.org/10.1007/s11002-014-9286-1>
- Wuermlji, A. J., Yoshikawa, H., & Hastings, P. D. (2021). A bioecocultural approach to supporting adolescent mothers and their young children in conflict-affected contexts. *Development and Psychopathology*, 33(2), 714–726.
<https://doi.org/10.1017/S095457942000156X>
- Yeoli, E., & Rand, D. (2020). *A checklist for prosocial messaging campaigns such as COVID-19 prevention appeals*.
<https://doi.org/https://doi.org/10.31234/osf.io/rg2x9>
- Zeng, S., Corr, C. P., O’Grady, C., & Guan, Y. (2019). Adverse childhood experiences and preschool suspension expulsion: A population study. *Child Abuse & Neglect*, 97.
<https://doi.org/10.1016/j.chab.2019.104149>
- ZERO TO THREE. (2016, February 10). *Infant-Early Childhood Mental Health*. ZERO to THREE.

<https://www.zerotothree.org/resources/110-infant-early-childhood-mental-health>

ZERO TO THREE. (2017). Infant and Early Childhood Mental Health Consultation: A Briefing Paper. In *ZERO TO THREE*.

APPENDIX

HART ASSOCIATES & ECHELON INSIGHTS (2021)

Agenda messages and percent of respondents who ranked them in their top three most convincing messages:

- **Brain development** (49%): “Babies’ brains develop fastest from before birth to age three. So, their relationships with caregivers and early experiences—both positive and negative—build the foundations of brain architecture, which supports their ability to learn, their behavior, and their overall health. That’s why it’s critical to support parents and babies early, so caregivers can prevent infants and toddlers from experiencing prolonged stress that can disrupt healthy development. Access to mental health resources, quality child care, and networks of community support are critical to set families on a path for success.”
- **Equity – forward facing** (45%): “Every child deserves a strong start in life. By ensuring that all babies and toddlers have access to resources and services they need— regardless of where they live, their family’s income or education, their gender, or the color of their skin—we can strengthen our communities and live up to our promise as a nation. We must make investments to support families most in need so that all children can succeed in school and life.” *(asked of half sample)*
- **Maternal support** (44%): “A healthy baby starts with a healthy mom. But our country is failing when it comes to maternal health. More women in the United States die in childbirth than in any other developed country, and Black women are more than twice as likely to die as White women. We must do better. All mothers need access to care during and after pregnancy, and they need access to the regular well-child visits, screenings, and mental healthcare that give their babies the best start in life.”
- **Full body health – specific** (43%): “Positive experiences early in children’s lives promote healthy physical development throughout the body, including the brain, the heart and lungs, the systems that turn food into energy, and the immune system. Negative experiences early in life can lead to long-term health problems such as high blood pressure, diabetes, heart disease, obesity, and mental health challenges. By investing in programs that support families with infants and toddlers, we can give more children a healthy foundation for life.” *(asked of half sample)*
- **Child poverty** (42%): “Kids only get one chance at a strong start. For too many, poverty stands in the way of healthy development. Housing instability, food insecurity, and overall stress can lead to long-term physical and mental health problems for the more than 40% of infants and toddlers in the United States who live below poverty or with low incomes. By investing in programs that support mothers during and after pregnancy, connect families to a community of care,

and build economic security, we can lay the foundation for a healthy childhood and future success for these families.” (*asked of half sample*)

- **Equity – historic perspective** (40%): “Every child deserves a strong start in life, but not every child starts from the same place. A history of systemic racism has resulted in deep inequities simply because of where a child lives or the color of her skin. It can mean they begin life with fewer advantages than their peers and keep losing ground over time. That is not how our country is supposed to work. We must demand that our systems work for all kids and families with programs that support every mother and give every baby the same strong start.” (*asked of half sample*)
- **Full body health – general** (35%): “Positive experiences early in children’s lives promote healthy physical development throughout the body. Negative experiences early in life can lead to long-term health problems such as high blood pressure, diabetes, heart disease, obesity, and mental health challenges. By investing in programs that support families with infants and toddlers, we can give more children a healthy foundation for life.” (*asked of half sample*)
- **ROI and community cohesiveness** (): “Strong communities start with strong families. Investing in young children’s health and care pays off for all of us. Babies grow up healthier. Parents have more opportunity to work. Communities are more connected, and our economy gets stronger. In fact, for every dollar we spend on high-quality programs that support young children from birth, we see a 13% annual return in economic benefits, in areas such as reduced healthcare costs and less crime. Investing in families is an investment in our communities and our future.”
- **Economic development/COVID** (31%): “The COVID-19 pandemic has hit families with infants and toddlers particularly hard. All the pressures that come with being a parent—healthcare, finding quality child care, getting time off of work, emotional stress—have been made even worse and shown just how important supports for parents and newborns are. Now we have the chance to help families recover from the pandemic stronger than before by putting families at the center of our efforts. Policies that give parents access to care and support early in a child’s life pay life-long dividends because healthy growth and development up to age three is so crucial for future success.” (*asked of half sample*)
- **National values message** (33%): “It is time to ask ourselves what kind of country we want to be. Are we satisfied with so many infants and toddlers being raised in poverty? Are we okay with new parents not having the basic necessities—healthcare, child care, mental health services, paid family leave—to raise the next generation of Americans? Studies have shown time and again that we can make a truly positive difference in the lives of young children and that doing so will make our country stronger over the long term.”

PERRYUNDEM ET AL. (2017)

Agenda messages and percent of respondents who ranked them “very convincing”:

- Parents and caregivers influence babies’ brain development from the start. As early as 3 months – well before a baby utters his or her first words – babies experience a whole range of emotions like joy, sadness, anger, interest, and excitement. Children who feel loved, comforted, and have the freedom to play form more brain connections, which increases their ability to trust, relate, communicate, and learn. (62%)
- Babies pick up on your emotions. They can sense your mood and when you feel happy, sad, or angry as early as 3 months. By 6 months, babies are affected by stress in their environment, like shouting in the home, even while asleep. If stress is prolonged, they risk having emotional and behavioral problems throughout their childhood and life. (58%)
- A child’s brain grows the most in the first 3 years of life. During this time, more than 1 million new neural connections form every second. Because of this, the early years are a time of great vulnerability as well as great opportunity to lay a healthy foundation. (57%)
- Babies’ earliest experiences—both good and bad—affect their brains and their health. The first 1,000 days of a child’s life give the best opportunity and highest risk for their healthy emotional development. Building strong relationships, showing love, and avoiding stress help put babies on the right track. (54%)
- If you do not pay attention to a baby’s emotional development, he or she can feel the impact for years to come. Without loving interactions and everyday learning, such as talking, singing, reading, and helping them explore their world, babies are unsure of whether their needs will be met and live in an aroused state of fear and insecurity. This elevates stress for extended periods of time and interferes with healthy brain growth. (52%)