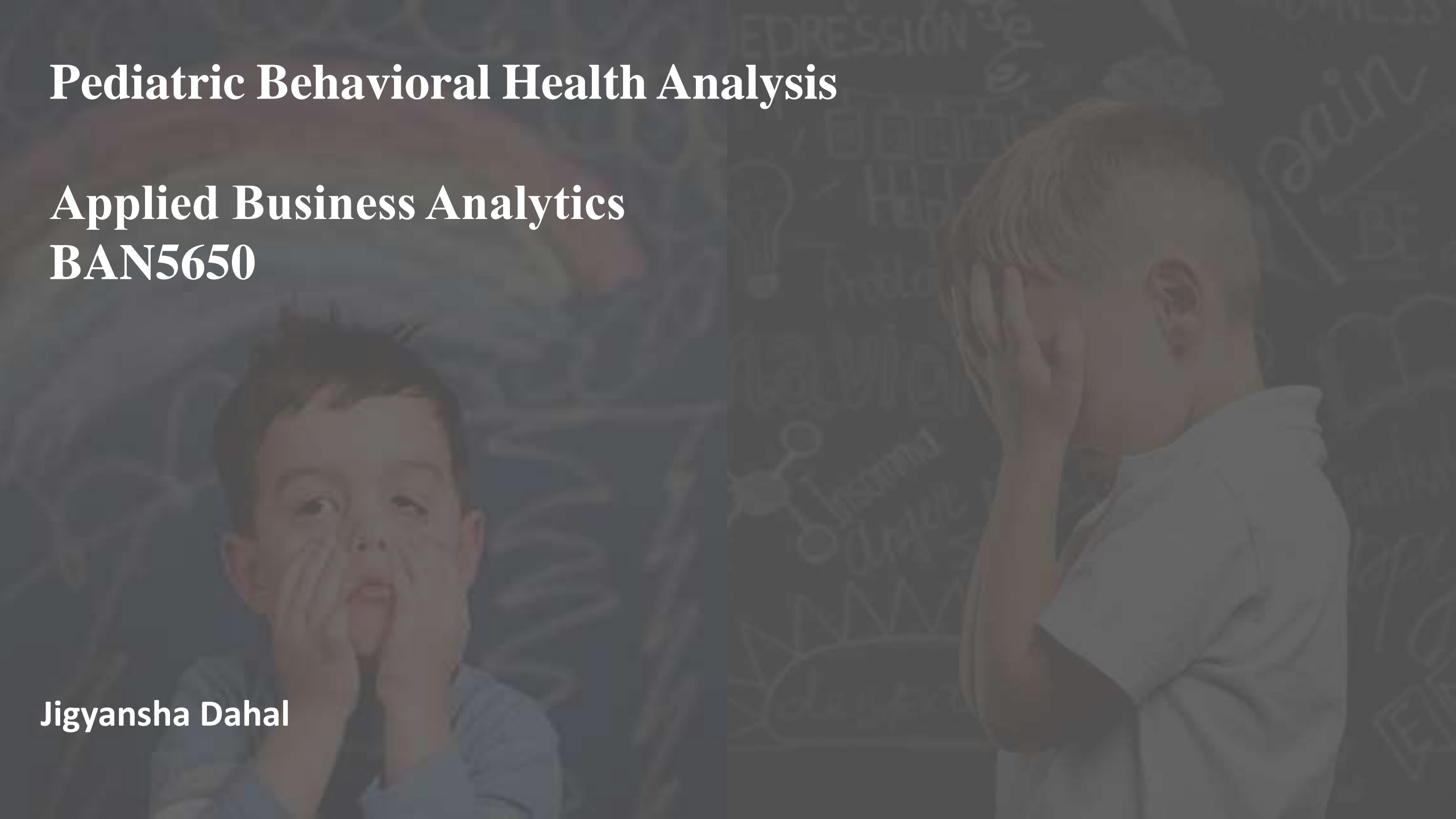


# **Pediatric Behavioral Health Analysis**

**Applied Business Analytics**  
**BAN5650**

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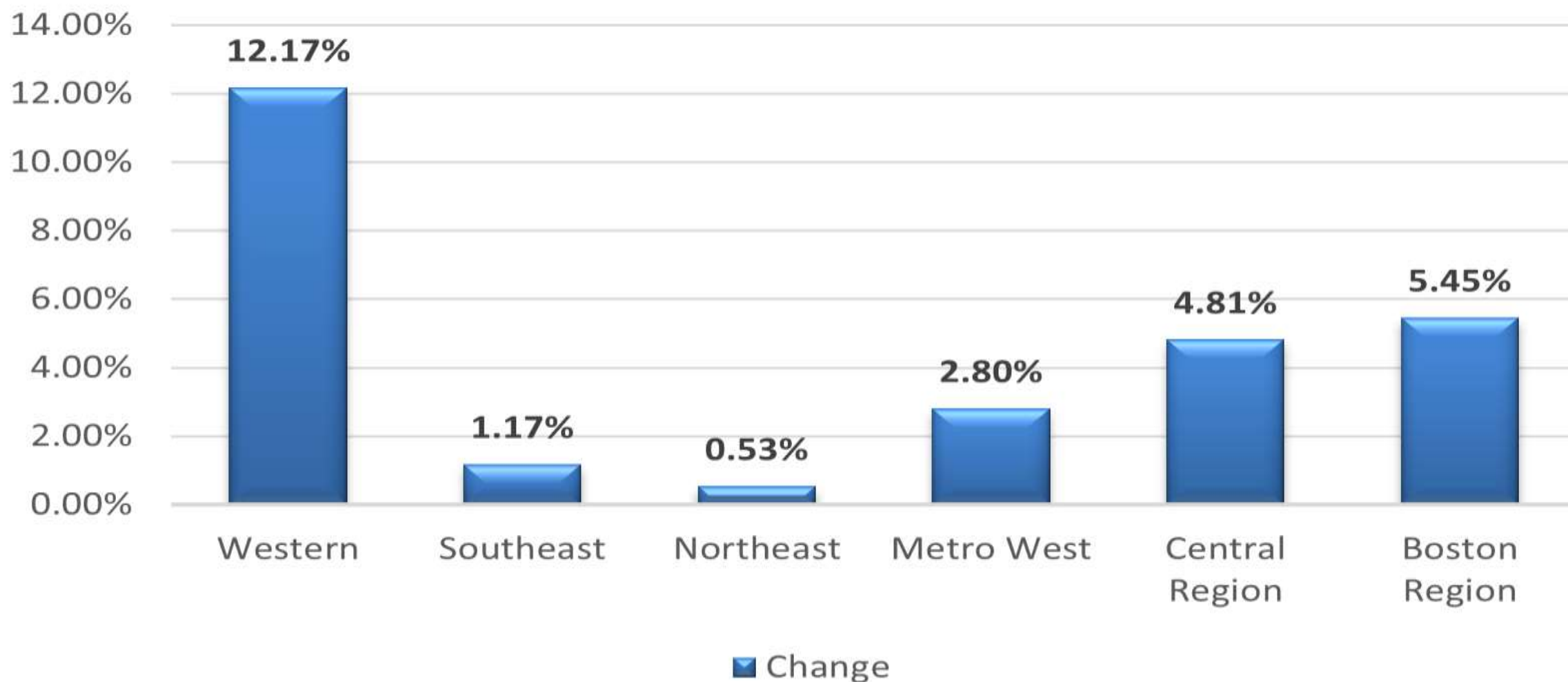
# Behavioral Health Overview

- Pediatric behavioral health refers to the mental, emotional, and social well-being of children and adolescents.
- Proper behavioral health is crucial for a child's overall development and can impact their academic performance, relationships, and future well-being.
- Understanding age-appropriate behaviors and recognizing deviations can help identify potential developmental issues early, allowing for timely intervention.
- By promoting understanding and awareness of behavioral health, we contribute to reducing the stigma surrounding mental health issues. This can encourage individuals to seek help without fear of judgment, promoting a more supportive and inclusive society.
- Attempt on understanding pediatric behavioral health trends within the state of Massachusetts and at a national level.

# Behavioral Health Analysis

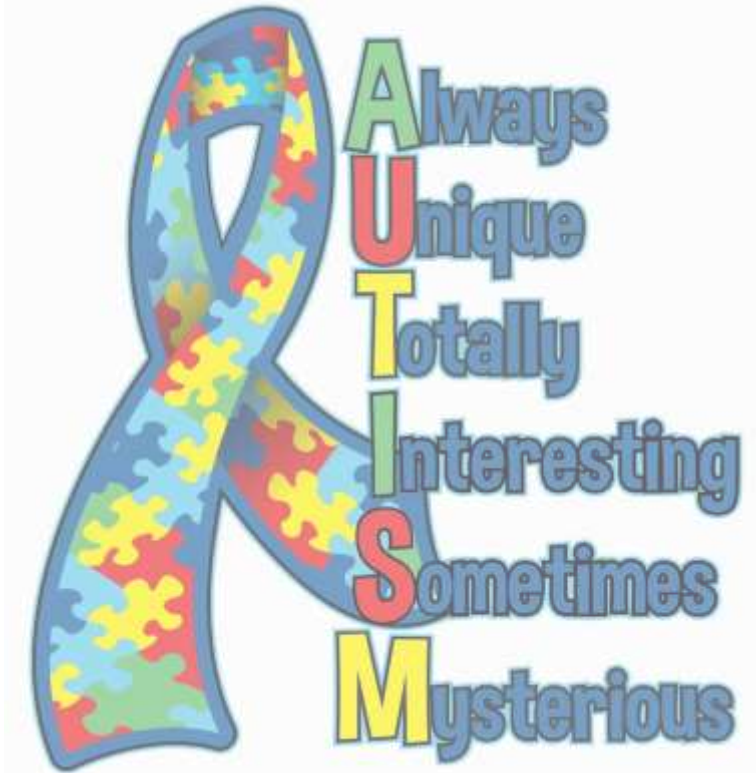
- Scrutinized the trends by examining the percentage of pediatric populations undergoing screening during hospital visits, with a particular emphasis on the subset requiring behavioral health interventions in the state of Massachusetts.
- The **Western, Central, and Boston** regions in Massachusetts exhibit the most substantial rises in the percentage of screenings identifying behavioral health needs, with increases of **12.71%, 4.8%, and 5.45%, respectively.**
- Over the course of the measurement period, the Central Region witnessed a noteworthy **decrease of 4.11%** in the screening rate for behavioral health, specifically measured as the percentage of visits incorporating a behavioral health screen.

## Change in % of screenings with a BH need identified



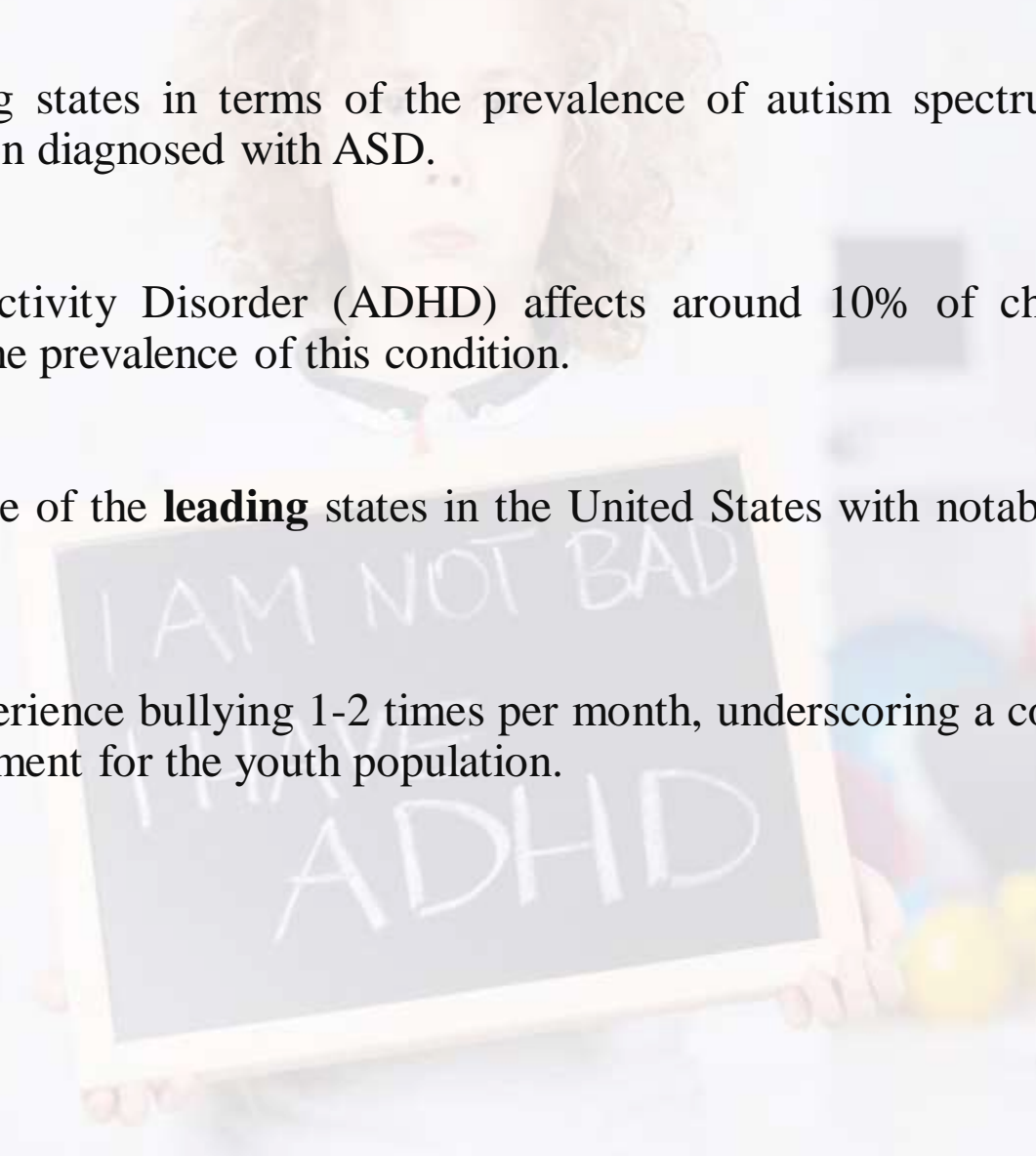
# Behavioral Health Trends: ADHD, ASD and Bullying (Component B)

- The states of **Louisiana, West Virginia, and New Hampshire** fall under the top 10 for the prevalence of both Attention-Deficit/Hyperactivity Disorder (ADHD) and autism spectrum disorder (ASD).
- Amongst which, **Louisiana** has the **highest proportion of ADHD** prevalence with 15.7% ADHD issues reported in the current time.
- This notable alignment in rankings underscores a matter of significant concern, warranting heightened awareness and collaborative efforts to address the challenges posed by these neurodevelopmental conditions within these regions.

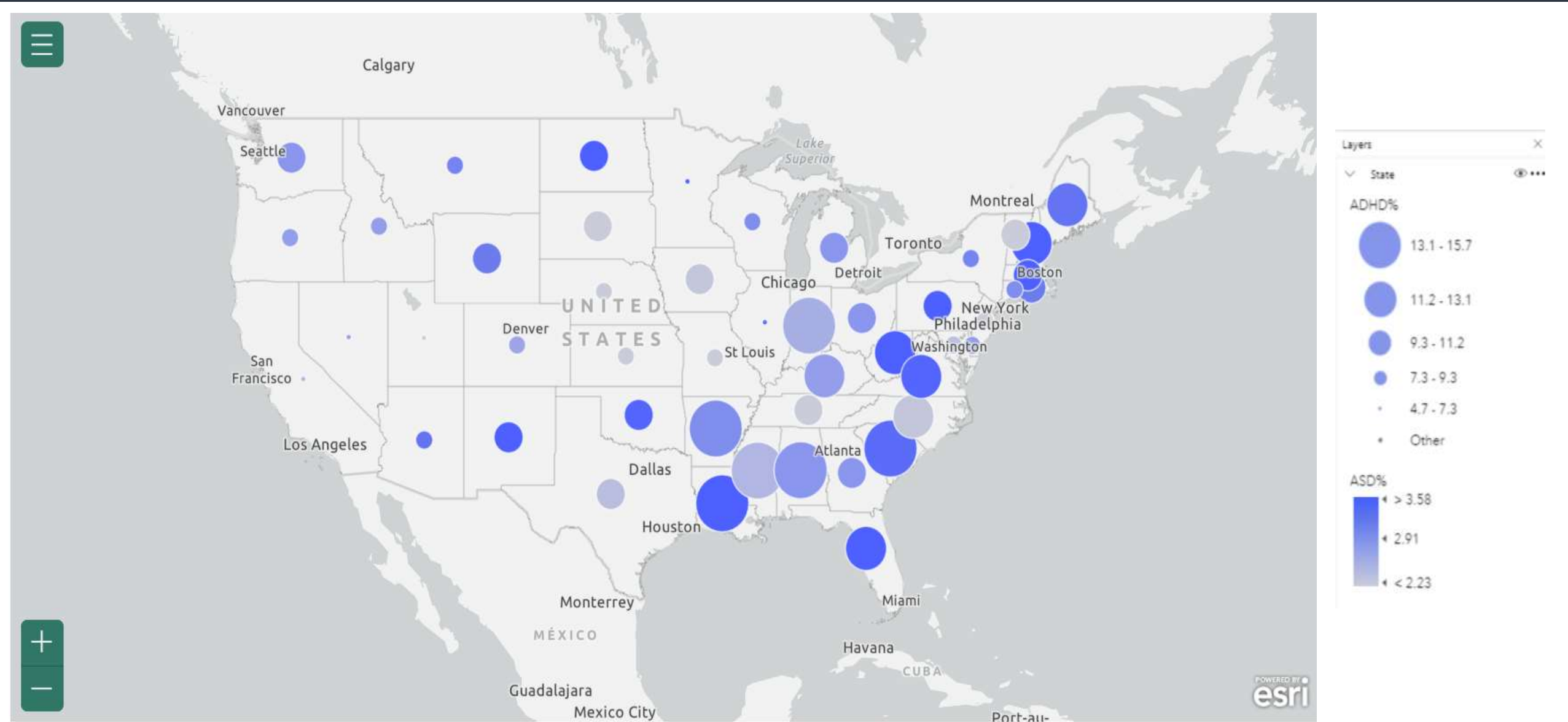


# Behavioral Health Trends: ADHD, ASD and Bullying

- Massachusetts is positioned 3rd among states in terms of the prevalence of autism spectrum disorder (ASD), with approximately 4% of the child population diagnosed with ASD.
- Concurrently, Attention-Deficit/Hyperactivity Disorder (ADHD) affects around 10% of children in Massachusetts, placing the state 23rd in the nation for the prevalence of this condition.
- Massachusetts distinguishes itself as one of the **leading** states in the United States with notably **low rates of bullying**, ranking among the top 5.
- About 3.6% of children in the state experience bullying 1-2 times per month, underscoring a commendable commitment to fostering a safe and inclusive environment for the youth population.



# NSCH DATA FOR ADHS, ASD and BULLYING % IN UNITED STATES : UNITED STATES MAINLAND





# Recommendations

- The prevalence of behavioral health needs and trends signifies the importance of the need to address and access these health needs to make pediatric lives better.
- Over the course of the measurement period, the Central Region in Massachusetts, witnessed a noteworthy **decrease of 4.11%** in the screening rate for behavioral health, specifically measured as the percentage of visits incorporating a behavioral health screen.
  - This decline underscores a significant shift in the region's healthcare landscape, prompting a closer examination of potential contributing factors.
  - The observed reduction may stem from intricate interactions involving changes in healthcare provider practices, fluctuations in patient engagement levels, modifications to screening protocols, and broader shifts within the healthcare ecosystem.
- The prevailing consensus within research underscores pharmacological intervention as the preferred approach for addressing Attention Deficit Hyperactivity Disorder (ADHD).



# Recommendations

- In consideration of this, explore pharmaceutical treatments to optimize outcomes in managing ADHD symptoms, with a specific focus on attention improvement and behavioral regulation.
- **Behavioral therapy:** an approach that aims to modify behavior by addressing the underlying patterns and reinforcing positive behaviors.
  - Implementing behavioral therapy involves a targeted approach aimed at instructing the child in behavioral regulation strategies to enhance the occurrence and duration of positive, on-task behaviors.
  - Additionally, environmental modifications are applied with a focus on accentuating the child's strengths while addressing specific areas of concern.
  - This comprehensive strategy seeks to optimize the child's behavioral outcomes through systematic and tailored therapeutic interventions.

# Recommendations

- **Collaborate with parents** to establish clear and achievable expectations concerning behavior management and task fulfillment.
  - support in recognizing and understanding the child's challenges with attentional regulation and executive functioning from a clinical perspective, offering insights and recommendations for effective intervention.
- **Task Analysis**
  - Break down complex tasks into smaller, more manageable steps. This can help the child focus on one aspect at a time, making it easier for them to achieve success and reinforcing positive behaviors.
- **Environment Modification**
  - Modify the child's environment to create a supportive and conducive setting for positive behavior. This involves identifying and leveraging the child's strengths while addressing areas of concern.
  - Consider factors such as seating arrangements, materials available, and the overall structure of the environment to enhance the child's success.





Thank You!!!