Welcome to PAX!

PAX = Peace • Productivity • Health • Happiness
PAXIS Institute develops solutions that improve the peace, productivity, health, and happiness of people around the world. PAXIS Institute incorporates the power of science and prevention to develop simple, proven strategies that address the basis of many of society’s multi-problems – human behavior.

These proven, low-cost strategies can increase efficiency and job satisfaction, improve academic and social outcomes in children, reduce health disparities and risk probability for mental health and substance use disorders, and even prevent factors leading to violence and suicide.
What are Evidence-based Kernels?

❖ Evidence-based Kernels make up the PAX Good Behavior Game and PAX Tools.
❖ They are fundamental units of behavioral influence.
❖ Evidence-based Kernels are proven.
❖ culturally responsive.
❖ trauma-informed.

Evidence-based Kernels: Fundamental Units of Behavioral Influence

Drews D. Entwistle / Anthony Regan

Abstract: This paper describes evidence-based kernels, fundamental units of behavioral influence that guide effective prevention and treatment for children, adults, and families. A kernel is a behavioral-influence procedure derived through experimental analysis to affect a specific behavior that is in decline; in the sense that removing any of its components would lead to its decline. Existing evidence shows that a variety of kernels can influence behavior to correct and some evidence suggests that some are sufficiently (if not necessarily) specific that combining them into a larger kernel may produce targeted behavioral change. The analyses of kernels could contribute to an empirically based theory of behavioral influence, suggest existing procedures or momentary effects, facilitate the development of effective behaviors, and inform the development of effective interventions by providing opportunities to counteract interventions that are less effective. Kernels involve some of the following mechanisms of behavioral influence: rewarding mechanisms, shaping procedures, changing client-related responses, and changing physiological states. The paper describes 10 of these kernels, and offers practical, theoretical, and research implications, including citing for a natural science of kernels that influence human behavior.

Keywords: Evidence-based kernels; Public health; Health; Prevention; Treatment

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This paper presents an analysis of fundamental units of behavioral influence that guide effective prevention and treatment. We call these units kernels. They are behavioral-influence procedures derived through experimental analysis. Some evidence suggests that kernels are sufficiently specific that combining them into a larger kernel may produce targeted behavioral change. Existing evidence shows that a variety of kernels can influence behavior to correct and some evidence suggests that some are sufficiently (if not necessarily) specific that combining them into a larger kernel may produce targeted behavioral change. The analyses of kernels could contribute to an empirically based theory of behavioral influence, suggest existing procedures or momentary effects, facilitate the development of effective behaviors, and inform the development of effective interventions by providing opportunities to counteract interventions that are less effective. Kernels involve some of the following mechanisms of behavioral influence: rewarding mechanisms, shaping procedures, changing client-related responses, and changing physiological states. The paper describes 10 of these kernels, and offers practical, theoretical, and research implications, including citing for a natural science of kernels that influence human behavior. The authors believe that kernels are fundamental units of behavioral influence and that understanding kernels could contribute to an empirically based theory of behavioral influence, suggesting existing procedures or momentary effects, facilitating the development of effective behaviors, and informing the development of effective interventions by providing opportunities to counteract interventions that are less effective. Kernels involve some of the following mechanisms of behavioral influence: rewarding mechanisms, shaping procedures, changing client-related responses, and changing physiological states. The paper describes 10 of these kernels, and offers practical, theoretical, and research implications, including citing for a natural science of kernels that influence human behavior.
What are Nurturing Environments?

“Creating nurturing environments is fundamental to preventing most problems of human behavior and producing the kind of caring and productive people every society values.”

– Anthony Biglan, Ph.D., The Nurture Effect

PAX makes environments more nurturing in the following ways:
Evidence-based Kernels make up both

and

and
What does PAX do?

PAX Reduces Problematic Behaviors

Disturbing, Disruptive, and Inattentive Behaviors decreased after implementing Kernels and decreased further after implementing the PAX Game.
When teachers implement PAX GBG

For every 100 first graders who get the evidence-based strategies in PAX GBG, we can expect to see the following results when they reach age 21:

<table>
<thead>
<tr>
<th>Number</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>fewer young people will need any form of special education services</td>
</tr>
<tr>
<td>6</td>
<td>more boys will graduate from high school</td>
</tr>
<tr>
<td>7</td>
<td>more boys will enter university</td>
</tr>
<tr>
<td>9</td>
<td>more girls will graduate from high school</td>
</tr>
<tr>
<td>7</td>
<td>more girls will enter university (because of not being pregnant)</td>
</tr>
<tr>
<td>1</td>
<td>fewer young people commit major violent crimes or die from them</td>
</tr>
<tr>
<td>10</td>
<td>fewer young people will develop serious drug addictions</td>
</tr>
<tr>
<td>7</td>
<td>fewer young people will become regular smokers</td>
</tr>
<tr>
<td>4</td>
<td>fewer young people will develop serious alcohol addictions</td>
</tr>
<tr>
<td>5</td>
<td>fewer young women will contemplate suicide</td>
</tr>
<tr>
<td>7</td>
<td>fewer young men will attempt suicide</td>
</tr>
</tbody>
</table>

About this data:
Two separate studies at Johns Hopkins University followed 1,500 children from first grade to adulthood.

Read more at www.pubmed.gov

What is **pax tools**?

- A collection of evidence-based strategies to improve cooperation and self-regulation with children.
- Is trauma-informed.
- Creates nurturing environments.
- Supports **parents** and **caregivers**, and other **caring adults** who interact with children in settings outside of a classroom.
How does PAX Tools work?

❖ Professionals attend 8 hours of training from the PAXIS Institute to learn to present PAX Tools Community Workshops.

❖ Caring adults attend a 2.5-hour PAX Tools Community Workshop in their community.

❖ Adults then implement nine evidence-based strategies during everyday interactions with young people.
PAXIS Trainer

Trains

PAX Tools
Community Educator

Presents

Caring Adults

Implements

Children and Adolescents
Who can use PAX Tools?

❖ Parents / Grandparents / Caregivers / Foster Parents
❖ Childcare Providers
❖ Preschool Staff
❖ After-School Staff
❖ Coaches
❖ Faith Based Staff / Volunteers
❖ Youth Workers
Resources for Users of PAX Tools
Who can become a PAX Tools Community Educator?

- Parent Educators
- Health Educators
- Prevention Educators
- Extension Educators
- Volunteer Coordinators
- Foster Care and Respite Providers
- Faith-Based Youth Workers/Volunteers
What people are saying about PAX Tools

“I love that PAX Tools teaches the concept that behavior is a skill set that needs to be taught like academic skills.”

“I really appreciate that PAX Tools are so practical and easy to use!”

“This training was great. I really liked how it gave the audience a chance to practice using PAX Tools with real-life challenges.”

“I’m excited to use what I learned here today!”

“The whole PAX Tools program works by supporting us in having the kinds of relationships with our children that help them learn better and bring us – the adults – greater joy.”
What people are saying about PAX Tools

❖ 97% of individuals who attended a PAX Tools Workshop found it to be very helpful

❖ 90% of participants claimed PAX Tools strategies would be very helpful to their practice

❖ 100% of respondents reported they intended to implement PAX Tools

* Data compiled from PAX Ohio Cures Evaluation Report from statewide PAX Implementation in Ohio, 2017-2019
Additional PAX Tools Trainings
Provides parents and caregivers with research-based strategies to increase their children’s focus, motivation, stamina, and a number of other skills that specifically help children improve their study habits and outcomes when learning at home.

This training will

- Address behavioral challenges related to school at home.
- Identify strategies to reduce conflict and improve performance.
- Apply layering of PAX Tools to common problematic situations when doing schoolwork at home.
- Make school at home more peaceful, productive, healthier, and happier for all.
PAXIS Trainer Trains PAX Tools Community Educator Presents Caring Adults Implements Children and Adolescents
❖ Provides research-based, trauma-informed behavioral health strategies for **youth-serving professionals**.

❖ Ensures and operationalizes a trauma-informed approach for agencies and individuals who work with youth.

❖ Includes strategies for **professionals** to use with youth in their practice or setting, and steps for **guiding caregivers** in utilizing selected strategies with children at home.
Youth-serving Professional

Use with: Children and Adolescents!

Share with: Parents and Caregivers

Use with: Children and Adolescents!

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PAXIS trainings are available virtually!

❖ **Blackboard Collaborate** provides for live synchronous training with participants at work or home.

❖ Multiple session options provide *flexibility* for limited professional development time.
Virtual PAX trainings are remarkably effective!

- 97.9% of users found their virtual training “Effective” or “Very Effective”.
- 91.6% of users were “Clear” or “Very Clear” on how to implement PAX immediately after training.*

*An increase from 84.5% from 2019’s in-person trainings.
Learn more about PAX!

❖ Visit [www.paxis.org](http://www.paxis.org)

❖ Watch videos on our YouTube channels:
  ❖ PAX Good Behavior Game
  ❖ PAX Tools

❖ Follow us on Facebook:
  ❖ @paxisinstitute
  ❖ @PAXGAME
  ❖ @PAXTools

For more information about PAX or our research base, email info@paxis.org