The following is a summary of findings from the PAX: Good Behavior Game that was implemented in 18 schools and funded through HB 118 during the 2018-2019 school year. The evaluation involved three components, including: a literature review, a pre/post-test survey, and focus group interviews with teachers. The following summary describes each area.

**Literature Review**

PAX is consistently recognized as an evidence-based, universal prevention program with strong short-term support for improved student classroom behavior, emotional regulation, and teacher retention. Longitudinal studies identify the program’s capacity to decrease substance use, promote mental health, and decrease suicidality (Bradshaw et al., 2009; Streimann et al., 2017). Research findings are summarized below.

**Substance Use**

- PAX has been described as a preventive vaccination program for high-risk substance use behavior (Kellam et al., 2014).
- PAX has a long-term impact on decreasing drug abuse and dependence disorders in highly aggressive and all males into adulthood, smoking for all males, and alcohol abuse and dependence disorders for all students (See Table 1 below).

**Mental Health**

- PAX is one of the few universal prevention programs to have a proven positive impact on children’s mental health (CDC, 2018).

**Suicide**

- PAX is one of the few universal preventative interventions for children shown to reduce the risk of future suicide attempts (Fortier et al., 2018; Newcomer et al., 2016; Wilcox et al., 2008).
- PAX participants demonstrate higher rates of self-regulation and positive youth development than non-participating peers; both are protective factors for suicide.

**Pre/Post-test Survey**

PAX teachers completed the pre and post-test, TOCA-C survey with a randomly selected group of six students. Eighteen teachers completed the pre-test (n=104 students) in October of 2018, and 11 teachers completed the post-test (n=61 students) in May of 2019. The pre and post-test evaluated negative and positive classroom behaviors, emotional and intellectual skills, positive peer and social behaviors, student discipline, academic performance, student support service utilization, and parent engagement. Using a paired sample t-test there were two items that were statistically significant and include:

- Decrease in students who tease classmates (p < .024)
- Increase in students sent to alternative classrooms for disciplinary reasons (p < .012)

<table>
<thead>
<tr>
<th>Substance Use</th>
<th>Demographics</th>
<th>PAX Classrooms</th>
<th>Standard Classrooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug abuse and dependence disorders</td>
<td>Highly aggressive males</td>
<td>28-29%</td>
<td>66-83%</td>
</tr>
<tr>
<td></td>
<td>All males</td>
<td>19%</td>
<td>38%</td>
</tr>
<tr>
<td>Regular smoking</td>
<td>Highly aggressive males</td>
<td>0%</td>
<td>40%</td>
</tr>
<tr>
<td></td>
<td>All males</td>
<td>6%</td>
<td>19%</td>
</tr>
<tr>
<td>Alcohol abuse and dependence disorders</td>
<td>All students</td>
<td>13%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Young adult outcomes, ages 19-21 Kellam et al., 2011; Kellam et al., 2014.
Two additional positive behavioral changes approached statistical significance and included:
- Students who get angry when provoked by other children (p < .067)
- Students who are easily distracted (p < .055)

**Focus Group Interviews**

Two focus group interviews were conducted with 13 teachers in Helena and Missoula. Responses were divided into two categories of positive attributes and challenges. Positive attributes included:
- PAX provided students with positive behavioral and lifetime skills
- Teachers appreciated that PAX does not shame children for bad behavior
- Teachers found it to be a positive way to manage classroom behaviors

**Challenges included:**
- The program took away teachers’ autonomy and own classroom management skills
- Discontinuity between classrooms implementing PAX and the external school climate

**Recommendations**

- PAX should be implemented in entire K-5 elementary schools, not individual classrooms
- PAX Partners should come into individual classrooms for teacher coaching and support
- PAX training should occur before the school year begins, followed by booster trainings
- Create opportunities for teachers to use each other as support (e.g., monthly meetings)
- Improve data collection and outreach for 2019-2020 implementation

* Important to note limited generalizability of findings due to small sample size and absence of comparison group

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**References**


