



# The Real Cost Of School Threats

A discussion on the impact of the weaponization of Technology  
Against Innocence and Solutions to Prevent Threats

**July 2024**  
**Draft Report**

# ABSTRACT

“School Threats Have Cost Taxpayers Over **\$1 Billion** in the Last Two Years. This Report Discusses Direct and Indirect Lost Instructional Time Caused by Threats and the Mental Health Impact on Students.”

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**CEO, TDR Technology Solutions**



# Table of Contents

Executive Summary .....	01
Introduction .....	02
National Trends .....	04
2022-2023 Summary of Threat Costs .....	12
2023-2024 Summary of Threat Costs .....	13
Explanation of School Threat Report .....	14
Mental Health Impact .....	16
Recommendations .....	16
Products to Prevent Threats .....	17
Conclusion.....	19
Appendix .....	20

# Executive Summary

School threats, whether they manifest as swatting, email threats, or other forms, cause significant disruptions to the educational environment. These threats, especially those with underlying messages of physical harm or death, have a greater impact. They not only lead to the loss of instructional hours but also severely affect the mental health of students, staff, and parents. The intricate planning of school time by day, week, and month makes these disruptions particularly difficult to recover from. This report, which examines over 16,000 schools and Approximately **16 million students impacted by threats** in the last few years that **cost taxpayers over 1 billion dollars** and solutions to prevent school threats, underscores the urgent need to address this issue.

The advent of technology has made it easier for individuals to perpetrate these threats anonymously. Cybercriminals can send threats via emails, social media, VOIP, and other digital platforms, making it challenging for authorities to trace the source. This weaponization of technology against innocents not only disrupts the educational process but also burdens law enforcement agencies and school administrations with the task of ensuring safety and security. The increasing role of technology in these threats underscores the need for technological solutions to combat them.

This report examines the direct and indirect impacts of school threats on instructional hours and the additional mental health impact on lost instructional time. We focus on threats that can be reduced or prevented through operational improvements that school administrators can implement to mitigate these threats. By quantifying the cost of threats in monetary terms, we aim to make the data accessible and actionable to a broader audience.

# 1 Introduction

This report results from years of comprehensive data collection on school threats in the United States. We analyze four distinct types of threats: Voice-Swatting, Email-Swatting, Social Media threats, and Other Threats. The 'Other threats' category includes threatening notes, in-person threats, Apple AirDrop threats, text threats, false tips, and weapons threats.

Since we began tracking threats in 2016, we have used the data to improve our swatting prevention products. We now track threats in over 120,000 schools across the United States. Sharing our findings with the public has become a priority, as the insights gained can benefit schools and communities nationwide.

Our data is used in FBI swatting training programs. The FBI has a successful program to train law enforcement and school personnel on reducing the impact of swatting and other school threats. This training has significantly reduced the average time to resolve a threat, resulting in taxpayer savings of at least \$200 million over the past two years.



## Impact of School Threats

This report focuses on documenting the impact of threats on lost instructional time and the additional challenges that arise from these incidents, such as:

- **Very High Cost to Taxpayers:** Threats cost taxpayers hundreds of millions of dollars per year. More than ever, we are seeing the same school get hit several times in a short period. Sometimes, several threat actors will target the same school in the same week. Prevention costs a fraction of what an actual threat costs, making prevention a smart part of any school budget.
- **Mental Health Issues:** The anxiety and fear generated by threats affect the mental well-being of students, teachers, and parents. The constant stress can lead to long-term psychological effects, reducing the overall effectiveness of the educational process. Threats can immediately affect a student's ability to concentrate and benefit from instruction. This disruption can also negatively impact test scores and overall academic performance.
- **Parental Concerns:** Many parents pull their children out of school due to safety concerns, further disrupting the educational process.
- **Operational Challenges:** Schools operate on tight schedules and carefully planned curricula. Any disruption can throw off these plans, leading to logistical challenges and educational setbacks.

- **Negative Impact on School Climate:** Threats can negatively impact the school climate, leading to increased bad behavior among students. Even hoax threats can lead students to feel the need to arm themselves for protection, exacerbating safety concerns.
- **Community Confidence:** Threats can also impact the community's confidence in the school's operational security, leading to various issues, including less support for school budgets.
- **Child Exploitation and Abuse:** Groups like 764 and Order of Nine Angles (O9A) are using the threat of swatting as part of their strategies for sextortion, child sexual exploitation, and child self-harm. Implementing swatting prevention measures can help stop some of these threats that are used to exploit children. An FBI bulletin issued on September 12, 2023, highlighted the activities of these groups, emphasizing the importance of preventive measures.

## The Importance of Prevention

Given the profound impact of these threats, prevention is undeniably the best solution. Our products are designed with a focus on prevention, aiming to stop threats before they can disrupt school operations and affect the mental health of the school community.

## Unaccounted Costs

We do not calculate the cost of first responders as we do not know how many were involved in each threat. Therefore, the true costs of these threats will be higher than the numbers presented in this report.

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Figure 1: Three Primary Sources of Threats



### 1. Students Who Attend the School

These threats are often internal and can be due to various personal or social reasons.



### 2. Students/Individuals who may associate with National Groups Making a Game of Attacking Schools Nationwide

These individuals, including those associated with groups like 764 and Order of Nine Angles, engage in swatting and other threats as a form of entertainment, challenge, and child exploitation and abuse.

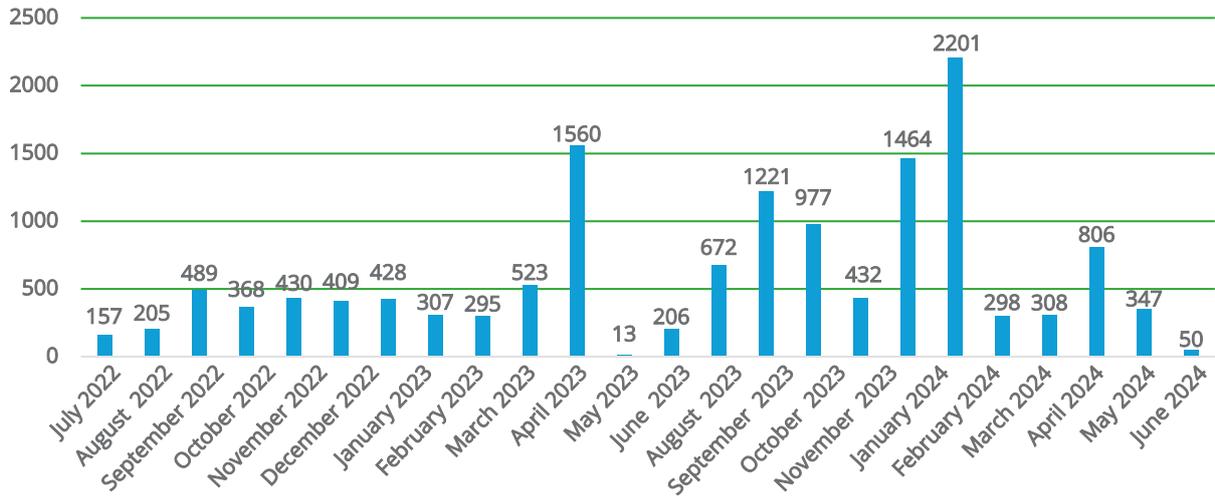


### 3. Foreign Actors

These threats are often politically motivated or driven by criminal intentions against the United States.

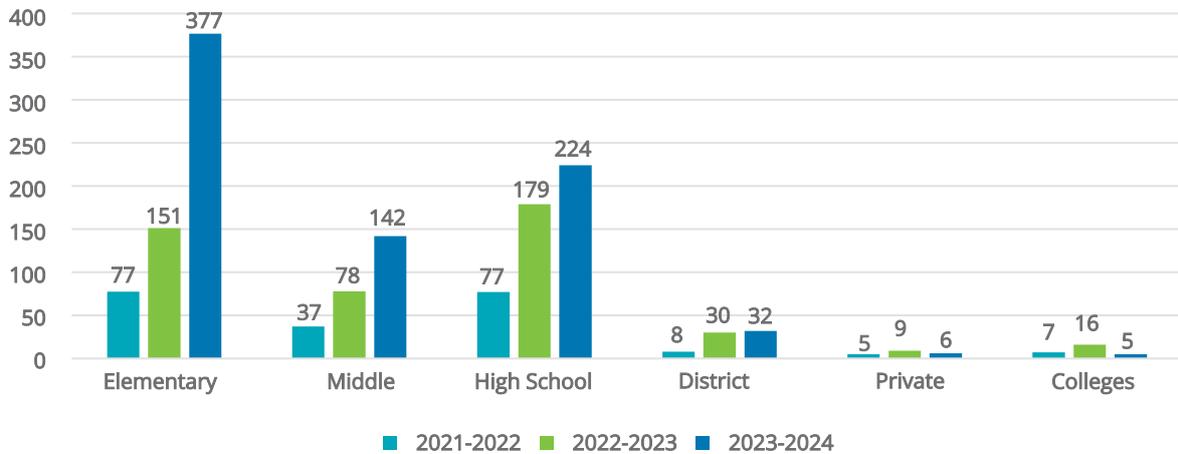
# 2 School Threats - National Trends

Figure 2: Schools Impacted by Swatting Incidents (2022-2024)



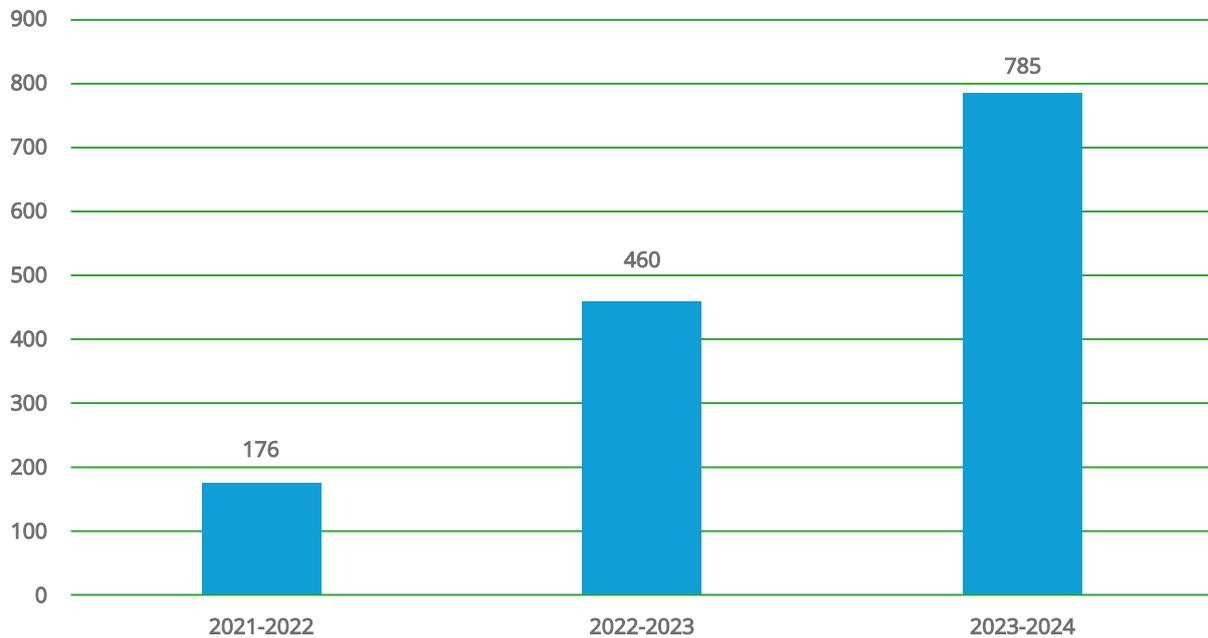
Swatting incidents include any hoax threat that impacts school instruction or a school event. We do not count events outside of school hours or outside-of-school events. We aim to look at threats that school administrators can reduce or prevent through policy changes.

Figure 3: Average School Threats Per Month - By Type of School



District Schools are defined as rural schools that serve students across a large age group or schools in a district like virtual schools that serve students across a large age group.

Figure 4: Average Schools Impacted per Month

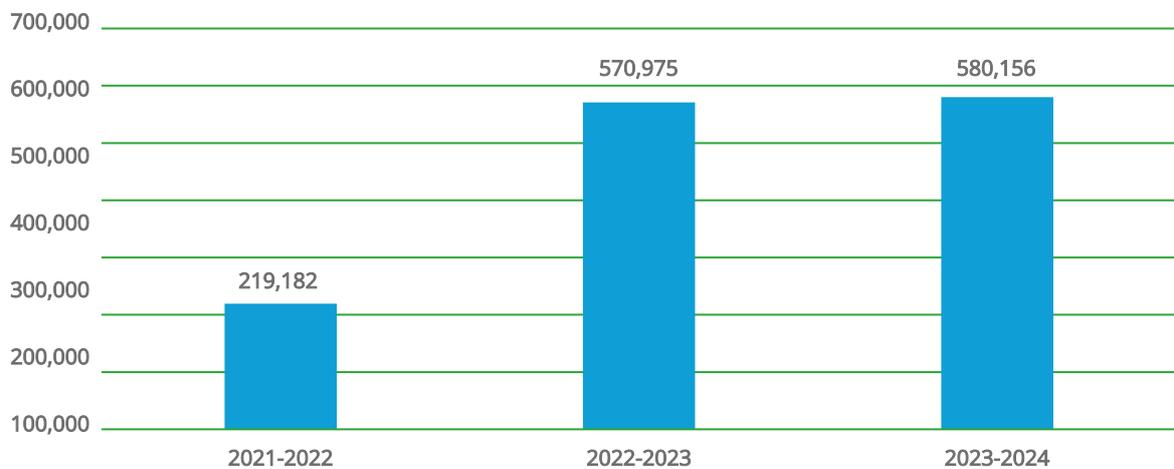


### Number of threats - This number should be less than 50 per month

- This gives us an idea of the volume of threats.
- You will never eliminate all school threats. Historically, this number should be below 50 per month.
  - For three years, we averaged 29 school threats per month.
  - In September 2021, a record of 151 school threats were made, up from a three year average of 29 per month.<sup>1</sup>

1. <https://www.latimes.com/opinion/story/2021-11-05/record-school-shooting-threats-guns>

Figure 5: Average Students Impacted Per Month



Students impacted should be less than 50,000 per month.

- This is a mental health number.
- How many students are being exposed to life-threatening violence? If this number exceeds 50,000 per month, it may impact the school climate, making students feel unsafe. This can also affect academic performance.
- If you have a school or district that has multiple threats impacting the same students, it can dramatically affect the school climate for that school. It is costly and takes time to restore safety in such situations.

# 33%

As many as one in three students who experience a traumatic event might exhibit symptoms of post-traumatic stress disorder (PTSD).<sup>2</sup>



2. <https://traumaawareschools.org/impact>

- The effects of trauma on children are far more pervasive than adults imagine. The National Survey of Children's Exposure to Violence found that over 60% of children surveyed experienced trauma, crime, or abuse in the prior year, with some experiencing multiple traumas. Often, children and adolescents do not have the necessary coping skills to manage the impact of stressful or traumatic events. As such, as many as one in three students who experience a traumatic event might exhibit symptoms of post-traumatic stress disorder (PTSD). Following a child's exposure to a traumatic event, parents and teachers are likely to observe the following symptoms:
  - It is common for those affected directly and indirectly to have increased anxiety, nightmares, difficulty sleeping, resistance to school, inability to trust, uneasiness, depression, fear, decline in academic performance, inability to fully express their thoughts and feelings, why questions, absence of feelings of safety and security, changes in eating habits, increased anger, hyper-vigilance, grief, loss, guilt, etc. These symptoms and behavior may result in Acute Stress Disorder.<sup>3</sup>
  - Post-Traumatic Stress Disorder (PTSD), and even delayed Post-Traumatic Stress Disorder. Mental health clinicians trained in trauma and grief can assist and support children and families during this healing time." –Melissa Dumaz, MS, LMFT, founder of uhelpyou.com.<sup>4,5</sup>

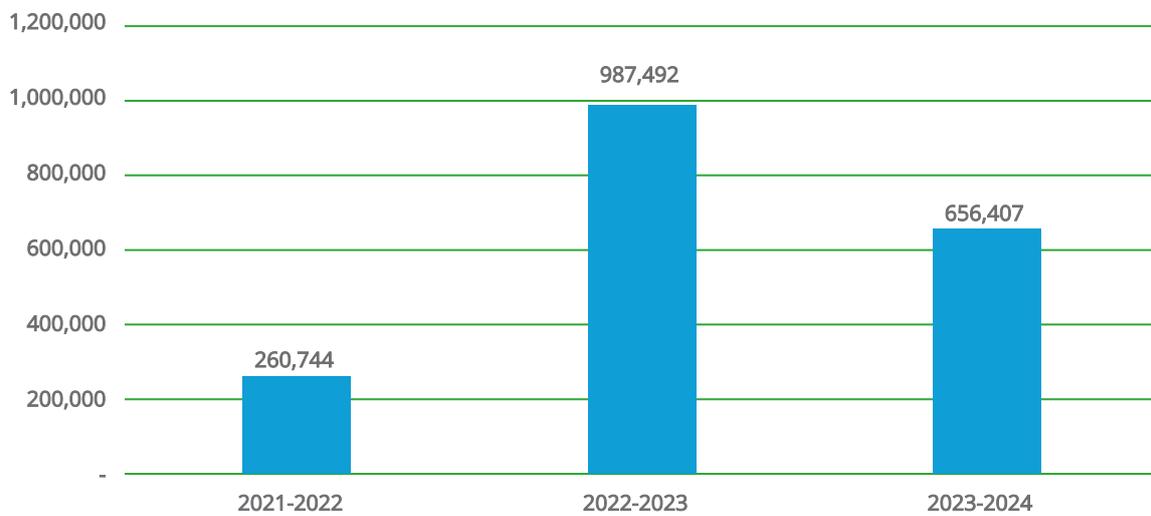


3. <https://www.psycom.net/ptsd-in-children-and-adolescents>

4. <https://www.wsav.com/news/local-news/it-causes-trauma-school-leaders-parents-concerned-for-kids-mental-health-with-recent-threats/>

5. <https://www.psycom.net/mental-health-wellbeing/school-shooting-survivor-mental-health>

Figure 6: Average Lost Instructional Hours Per Month

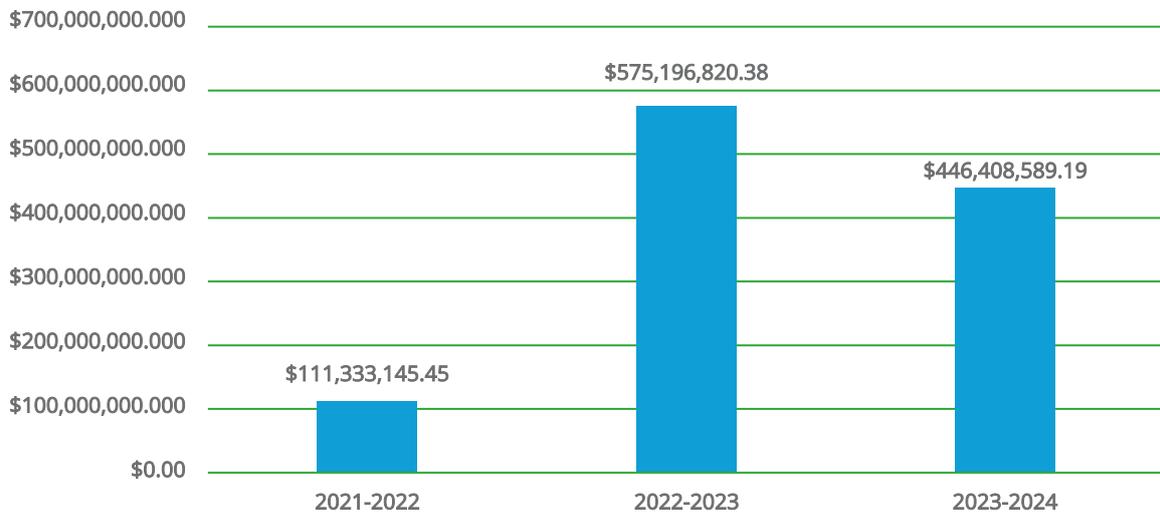


Lost Instructional Hours: this number should be less than 100,000 per month

- This is an academic impact number.
- If this number exceeds 80,000 – 100,000 per month, it may impact academic scores.



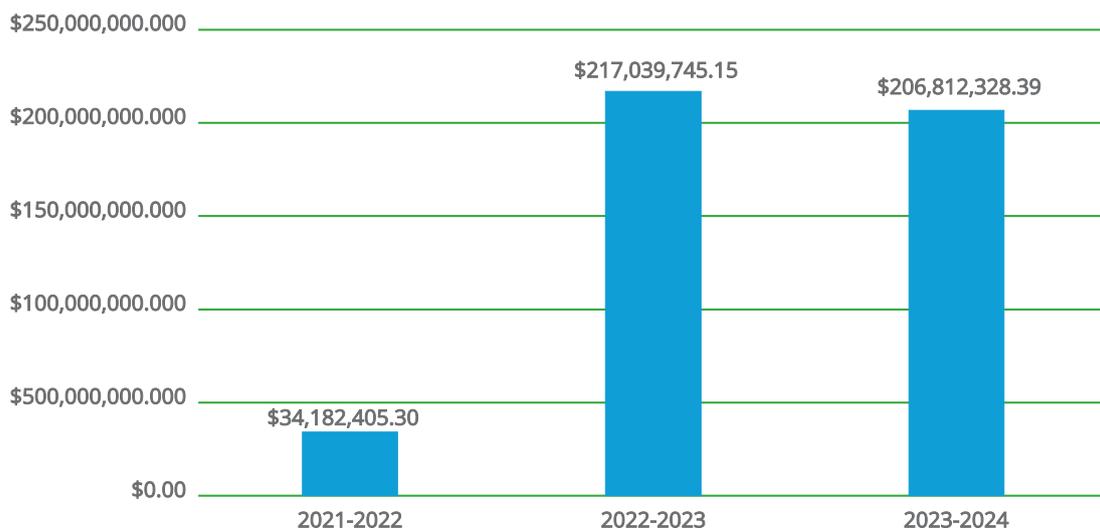
Figure 7: Cost to Taxpayers



This number Should be less than \$5,000,000. Per year

- The average cost per student per threat has dropped from \$101.59 to \$64.12. <sup>6</sup>
- See the attached report for details.

Figure 8: Mental Health Cost

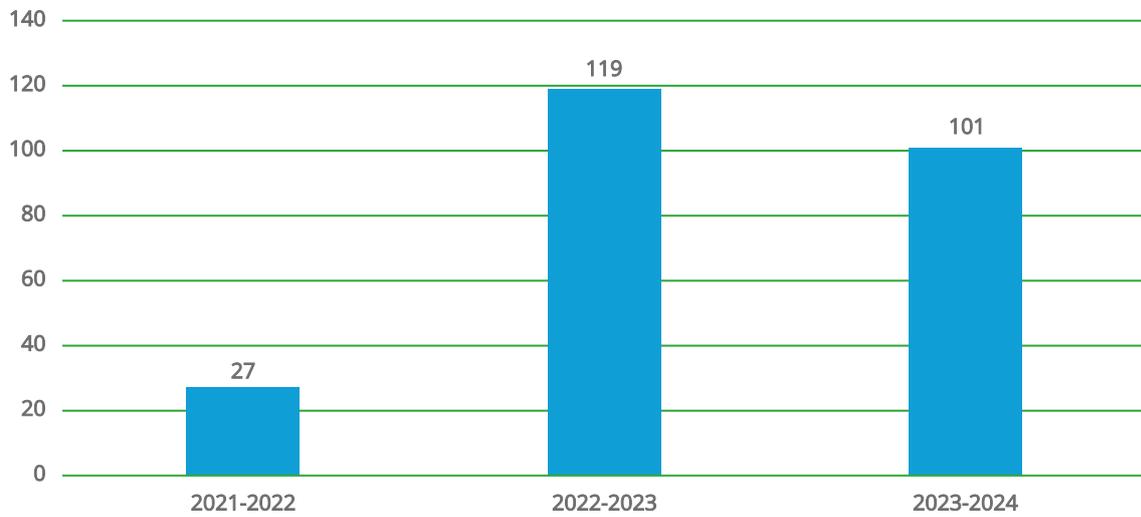


This number Should be less than \$3,100,000. Per year

- The average mental health cost per student per event is approximately \$30 - \$32

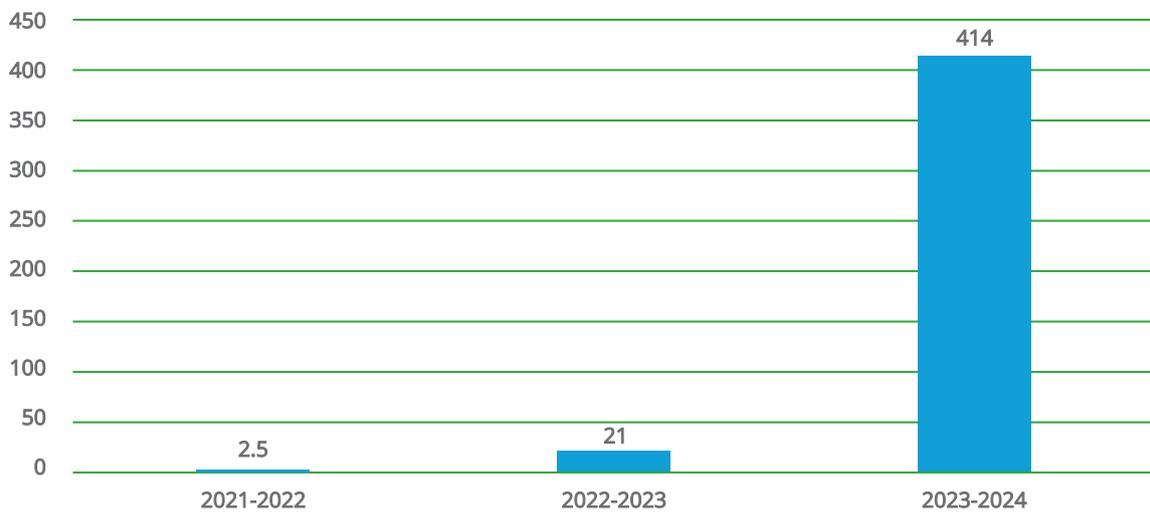
6. <https://www.nwea.org/research/publication/educations-long-covid-2022-23achievement-data-reveal-stalled-progress-toward-pandemic-recovery/>

Figure 9: School Voice Swatting Threats - Average Schools Impacted Per Month



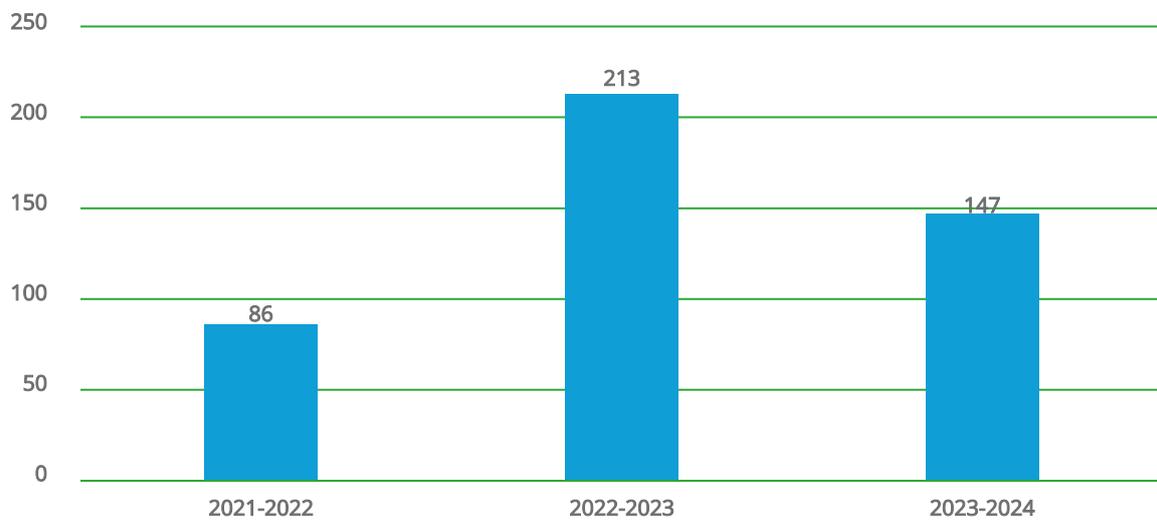
This number Should be less than 50 per month.

Figure 10: School Email Threats - Average Schools Impacted Per Month



This Number should be less than 50 per month.

Figure 11: School Social Media Threats - Average Schools Impacted Per Month



This Number should be less than 50 per month.



# 3 2022-2023 Summary of Threat Cost

School Threats 2022 - 2023								
State	# of Schools Threats	Student Impacted	Cost During Threat	Total Cost Rank	Total # of Students Rank (fixed field)	Outside of Threat Cost (Student Attendance)	Mental Health Costs	Total Taxpayer Cost
FL	1,170	1,441,927	\$17,979,719.15	1	3	\$40,393,578.25	\$45,157,949.02	\$103,531,246.42
MA	106	216,802	\$12,687,706.83	2	15	\$16,515,040.27	\$18,462,968.09	\$47,665,715.20
TX	385	726,900	\$11,031,453.20	3	2	\$15,746,529.35	\$17,603,812.30	\$44,381,794.84
NY	185	220,490	\$8,497,189.83	4	4	\$12,691,258.43	\$14,188,176.09	\$35,376,624.35
VA	129	288,053	\$13,324,599.12	5	12	\$9,461,541.48	\$10,577,518.17	\$33,363,658.77
CO	278	299,958	\$9,088,573.41	6	21	\$8,151,744.14	\$9,113,231.91	\$26,353,549.46
NC	238	264,855	\$6,648,812.11	8	9	\$6,295,616.43	\$7,038,176.31	\$19,982,604.85
PA	106	147,022	\$7,879,287.53	9	7	\$5,405,962.97	\$6,043,589.37	\$19,328,839.87
MI	141	185,644	\$8,095,858.46	10	10	\$4,424,078.99	\$4,945,893.43	\$17,465,830.88
IL	94	164,339	\$4,344,741.00	11	5	\$5,022,372.70	\$5,614,755.12	\$14,981,868.83
OH	159	179,819	\$5,049,489.13	12	6	\$4,533,020.04	\$5,067,683.94	\$14,650,193.12
CA	165	203,952	\$4,938,544.83	13	1	\$4,417,955.32	\$4,939,047.48	\$14,295,547.63
GA	193	215,581	\$4,430,382.81	14	8	\$4,626,689.20	\$5,172,401.26	\$14,229,473.27
AL	109	162,043	\$3,982,502.40	15	23	\$3,860,621.82	\$4,315,977.21	\$12,159,101.42
MS	29	137,209	\$3,694,674.10	16	34	\$3,577,880.07	\$3,999,886.44	\$11,272,440.61
AZ	54	103,349	\$5,028,479.36	17	13	\$2,386,636.25	\$2,668,136.94	\$10,083,252.55
IN	183	178,289	\$3,571,675.27	18	14	\$3,006,246.84	\$3,360,829.80	\$9,938,751.91
NJ	44	82,663	\$2,484,208.87	19	11	\$3,428,375.42	\$3,832,747.91	\$9,745,332.20
OR	107	64,720	\$1,043,506.99	20	29	\$3,808,077.94	\$4,257,235.85	\$9,108,820.77
DC	4	28,639	\$3,762,108.07	21	48	\$2,034,407.63	\$2,274,363.40	\$8,070,879.10
CT	82	75,407	\$2,097,302.24	22	31	\$2,457,126.77	\$2,746,941.72	\$7,301,370.72
LA	127	114,975	\$2,810,927.91	23	26	\$2,087,695.24	\$2,333,936.21	\$7,232,559.35
WI	64	102,463	\$2,235,908.93	24	22	\$2,294,635.29	\$2,565,284.59	\$7,095,828.81
SC	53	90,681	\$1,839,045.44	25	25	\$2,465,624.75	\$2,756,442.03	\$7,061,112.22
OK	59	97,489	\$1,872,181.09	26	28	\$2,290,520.71	\$2,560,684.69	\$6,723,386.49
NE	136	104,404	\$1,751,480.64	27	36	\$2,265,400.12	\$2,532,601.16	\$6,549,481.93
TN	138	133,013	\$1,639,123.35	28	17	\$2,169,605.73	\$2,425,507.94	\$6,234,237.02
WA	79	77,841	\$1,692,328.74	29	16	\$1,772,242.74	\$1,981,276.50	\$5,445,847.98
UT	51	80,698	\$1,288,895.50	30	24	\$1,512,967.32	\$1,691,419.87	\$4,493,282.69
NV	98	62,404	\$1,083,217.64	31	35	\$1,551,208.71	\$1,734,171.79	\$4,368,598.14
MD	33	44,253	\$1,276,063.09	32	18	\$1,416,738.72	\$1,583,841.23	\$4,276,643.05
NM	139	88,658	\$810,098.49	33	38	\$1,532,935.57	\$1,713,743.36	\$4,056,777.43
KS	28	39,794	\$1,037,930.70	7	32	\$988,273.35	\$1,104,838.93	\$3,131,042.98
RI	24	32,936	\$1,108,280.88	35	44	\$895,512.19	\$1,001,136.71	\$3,004,929.78
MN	39	33,769	\$1,174,732.95	36	19	\$842,689.52	\$942,083.67	\$2,959,506.14
MO	41	46,972	\$949,204.02	37	20	\$814,639.46	\$910,725.14	\$2,674,568.62
IA	54	40,998	\$724,327.27	38	30	\$749,889.48	\$838,337.98	\$2,312,554.73
DE	58	31,431	\$620,134.52	39	45	\$745,904.78	\$833,883.29	\$2,199,922.59
VT	30	17,620	\$563,179.52	40	39	\$760,273.87	\$849,947.20	\$2,173,400.60
WV	56	39,611	\$429,556.20	41	40	\$764,965.92	\$855,192.67	\$2,049,714.78
AR	28	26,526	\$548,867.53	42	33	\$579,164.02	\$647,475.67	\$1,775,507.21
ME	30	18,692	\$799,439.10	43	43	\$438,886.97	\$490,653.12	\$1,728,979.19
KY	33	26,881	\$559,132.43	34	27	\$494,743.54	\$553,097.91	\$1,606,973.89
NH	25	18,978	\$326,844.52	44	41	\$482,202.51	\$539,077.68	\$1,348,124.71
AK	51	14,628	\$285,547.54	45	50	\$440,642.37	\$492,615.58	\$1,218,805.50
WY	17	15,409	\$306,489.55	46	51	\$411,651.44	\$460,205.19	\$1,178,346.18
MT	20	21,346	\$267,231.41	47	46	\$388,774.70	\$434,630.18	\$1,090,636.28
ND	16	12,581	\$308,558.13	48	49	\$272,488.35	\$304,628.00	\$885,674.48
ID	17	17,596	\$219,360.18	49	37	\$224,781.74	\$251,294.46	\$695,436.38
HI	8	9,154	\$224,774.79	50	42	\$184,736.26	\$206,525.67	\$616,036.72
SD	4	3,517	\$38,349.05	51	47	\$56,500.77	\$63,164.96	\$158,014.77
<b>5,517</b>	<b>6,852,979</b>	<b>\$168,452,025.83</b>				<b>\$194,141,056.44</b>	<b>\$217,039,745.15</b>	<b>\$579,632,827.42</b>

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State	# of Schools Threats	Student Impacted	Cost During Threat	Total Cost Rank	Total # of Students Rank (fixed field)	Outside of Threat Cost (Student Attendance)	Mental Health Costs	Total Taxpayer Cost
FL	1,564	1,204,480	\$8,165,819.94	1	3	\$22,603,651.39	\$34,458,713.31	\$65,228,184.64
NY	382	415,160	\$15,009,737.09	2	4	\$19,391,921.73	\$29,562,510.05	\$63,964,168.88
TX	802	712,476	\$10,001,986.08	3	2	\$10,106,321.68	\$15,406,840.05	\$35,515,147.81
CA	902	687,696	\$4,856,336.42	4	1	\$11,665,880.73	\$17,784,349.64	\$34,306,566.80
MD	323	279,205	\$3,228,454.87	5	18	\$9,176,922.06	\$13,989,993.07	\$26,395,370.00
PA	450	273,340	\$8,213,893.96	6	7	\$5,636,239.79	\$8,592,309.60	\$22,442,443.35
OH	658	391,598	\$2,744,825.87	7	6	\$5,820,285.04	\$8,872,882.09	\$17,437,993.00
NC	347	295,647	\$5,071,295.83	8	9	\$4,330,969.11	\$6,602,456.41	\$16,004,721.35
OR	217	138,175	\$1,171,747.60	9	29	\$3,813,108.16	\$5,812,990.06	\$10,797,845.83
LA	267	190,811	\$4,211,739.21	10	26	\$2,504,640.64	\$3,818,263.36	\$10,534,643.22
NV	56	64,790	\$6,738,679.86	11	35	\$1,203,324.09	\$1,834,438.13	\$9,776,442.09
VA	158	149,746	\$2,159,063.75	12	12	\$2,586,510.25	\$3,943,071.57	\$8,688,645.57
NJ	86	73,831	\$2,512,971.75	13	11	\$2,341,965.08	\$3,570,268.44	\$8,425,205.27
MN	54	91,149	\$2,227,214.81	14	19	\$2,246,315.69	\$3,424,453.29	\$7,897,983.80
IA	225	111,574	\$3,808,309.03	15	30	\$1,515,562.16	\$2,310,437.42	\$7,634,308.60
WA	201	135,289	\$1,042,101.15	16	16	\$2,544,417.65	\$3,878,902.44	\$7,465,421.24
IL	115	121,573	\$1,474,361.06	17	5	\$2,352,670.36	\$3,586,588.38	\$7,413,619.79
DC	198	78,172	\$245,779.66	18	48	\$2,804,367.16	\$4,275,189.09	\$7,325,335.91
SC	173	176,893	\$976,910.61	19	25	\$2,318,924.75	\$3,535,144.02	\$6,830,979.38
MI	180	115,318	\$2,368,367.71	20	10	\$1,552,013.06	\$2,366,005.92	\$6,286,386.69
IN	212	143,181	\$1,567,980.16	21	14	\$1,857,078.13	\$2,831,070.16	\$6,256,128.45
RI	37	59,251	\$175,451.60	22	44	\$2,337,425.58	\$3,563,348.09	\$6,076,225.28
CO	151	102,194	\$655,919.52	23	21	\$1,931,841.23	\$2,945,044.67	\$5,532,805.41
GA	84	104,588	\$1,087,722.15	24	8	\$1,500,940.43	\$2,288,146.95	\$4,876,809.53
TN	166	123,431	\$948,217.33	25	17	\$1,466,696.21	\$2,235,942.47	\$4,650,856.01
CT	88	64,784	\$791,428.72	26	31	\$1,497,313.05	\$2,282,617.09	\$4,571,358.86
MA	88	53,866	\$1,375,462.90	27	15	\$1,245,388.41	\$1,898,564.15	\$4,519,415.47
UT	74	83,242	\$1,642,366.22	28	24	\$1,099,374.83	\$1,675,970.03	\$4,417,711.08
MT	139	78,970	\$1,691,137.76	29	46	\$1,054,739.11	\$1,607,923.96	\$4,353,800.84
WI	151	81,836	\$1,099,505.51	30	22	\$1,102,680.94	\$1,681,010.10	\$3,883,196.56
AK	184	55,336	\$526,240.39	31	50	\$1,313,620.56	\$2,002,582.40	\$3,842,443.35
KY	62	63,000	\$992,373.74	32	27	\$992,777.00	\$1,513,464.24	\$3,498,614.97
MS	27	35,307	\$804,362.01	33	34	\$671,986.63	\$1,024,427.16	\$2,500,775.80
KS	48	46,540	\$148,486.81	34	32	\$853,323.44	\$1,300,870.69	\$2,302,680.94
OK	68	56,722	\$708,681.64	35	28	\$585,361.84	\$892,369.80	\$2,186,413.28
ME	104	40,028	\$727,012.66	36	43	\$472,835.62	\$720,826.33	\$1,920,674.61
AR	66	42,143	\$397,846.22	37	33	\$509,619.55	\$776,902.53	\$1,684,368.30
DE	22	21,417	\$502,767.04	38	45	\$372,722.19	\$568,205.86	\$1,443,695.09
SD	27	26,471	\$303,733.90	39	47	\$433,736.95	\$661,221.37	\$1,398,692.22
AZ	27	33,558	\$357,072.09	40	13	\$390,769.99	\$595,719.28	\$1,343,561.36
ID	48	26,807	\$446,286.74	41	37	\$247,441.32	\$377,218.24	\$1,070,946.29
MO	40	24,860	\$165,370.70	42	20	\$316,950.26	\$483,182.91	\$965,503.88
HI	8	14,121	\$309,297.11	43	42	\$208,979.53	\$318,584.18	\$836,860.82
NM	39	21,527	\$101,777.48	44	38	\$287,892.74	\$438,885.44	\$828,555.66
AL	40	22,045	\$213,680.46	45	23	\$237,379.17	\$361,878.74	\$812,938.37
VT	15	7,002	\$289,656.66	46	39	\$151,164.32	\$230,446.31	\$671,267.29
WV	21	15,786	\$148,493.21	47	40	\$205,827.74	\$313,779.35	\$668,100.29
ND	10	6,738	\$103,661.25	48	49	\$88,809.22	\$135,387.48	\$327,857.95
NH	6	3,835	\$97,408.37	49	41	\$71,457.17	\$108,934.71	\$277,800.25
NE	11	4,608	\$47,952.51	50	36	\$68,513.73	\$104,447.50	\$220,913.75
WY	4	2,407	\$3,511.46	51	51	\$46,815.08	\$71,368.45	\$121,694.99
<b>9,425</b>	<b>7,172,524</b>	<b>\$104,660,460.62</b>				<b>\$140,137,472.56</b>	<b>\$213,636,146.98</b>	<b>\$458,434,080.15</b>

# 5 Explanation of School Threat Report

## 5.1 State or District Name

- 51 states or districts listed separately
- We will refer to this as States, but it also includes Washington, DC

## 5.2 Threats

- Number of School Threats in each State
- This is a numeric value.

## 5.3 Students Impacted

- The number of students impacted by the threats in the state or district listed.
- This is a numerical value

## 5.4 Cost During Threat

- This refers to the lost instructional time due to the threat.
- If a lockdown or evacuation lasts one hour and the students return to class, this number would represent the cost of the school's students losing one hour of instructional time.
- Many threats have zero lost instructional time.

## 5.5 Total Cost Rank

- This represents how a state's threat costs compare to other state's threat costs.
- This represents lost instructional hours.
- 1 would represent the state with the highest threat cost.
- 51 would represent the state with the lowest threat costs.

## 5.6 Total # of Students Rank

- This represents how a state's total students compare to other state's total students.
- 1 would represent the state with the highest number of students.
- 51 would represent the state with the lowest number of students.
- Note: you would expect cost and student rank to match up. If the cost rank is 6 and the student rank is 21 that may indicate a state with a bigger problem. If the cost rank is lower than the student rank, it may indicate a state with a smaller problem.

## 5.7 Outside of Threat Cost (see attached document "Anatomy of a School Threat")

- This represents lost instructional Hours.
- Even after a threat is deemed non-credible, students still leave school because parents are concerned for their safety. Some may not attend school the next day due to safety concerns.

## 5.8 Mental Health Costs

- See the attached paper "Mental Health Cost" for an explanation.
- This cost represents lost instructional time.
- If a student experiences anxiety as a result of a threat in the school, they may not be able to concentrate on learning or testing fully.

## 5.9 Total Taxpayer Cost

- This is the total cost of the threat due to lost instructional hours. It includes the following costs:
- Cost During Threat
- Outside of Threat Cost
- Mental Health Cost

## 6 Mental Health Impact

We are beginning to understand how threats affect students' ability to concentrate and learn. The mental health impact of threats contributes to lost instructional time. Threats can immediately affect a student's ability to concentrate and benefit from instruction. This disruption can also negatively impact test scores and overall academic performance. Our ongoing research aims to provide a deeper understanding of these effects.

.See the attached Document, "Draft paper on the Mental health costs of Swatting."

## 7 Recommendations

Preventing and mitigating threats is a complex issue involving multiple disciplines. Each district must consider local issues and the school climate when determining how to prevent and mitigate threats. Coordination with law enforcement needs to be engaged early in the process. Programs to identify students who are at risk also need to be considered as part of a comprehensive solution.



### Sign up

- Sign up for the FBI swatting and threat mitigation course



### Harden Cyber Facilities

- Install threat prevention products in schools and 911 centers
- Perform NIST Audits



### Mental Health

- Programs to improve school Climate
- Identify and address at-risk students



### Harden Physical Facilities

- SRO's
- Electronic Locks
- Video Cameras
- Secure Doors
- Protective Glass

## 8 Products To Prevent Threats

**SAM (School Access Manager):** This comprehensive software suite is installed in school districts to prevent and reduce various threats. SAM uses four approaches to ensure school safety:



### **SAM** **VOICE**

Monitors all incoming calls to the school, effectively acting as an electronic School Resource Officer (SRO). It prevents hoax calls and swatting incidents, which are significant sources of lost instructional hours.



### **SAM** **AIRDROP**

Monitors Apple AirDrop networks within the school, creating an audit log of messages. This helps identify students who send threatening, harassing, or bullying messages.



### **SAM** **EMAIL SWATTING PROTECTION**

Utilizes a pattern recognition program to identify email swatting threats. The program creates filters that are updated and loaded into popular email systems to prevent these threats.



### **SAM** **EDUCATION**

Provides educational programs, including posters and instructional videos. These materials articulate the consequences of making threats, list potential penalties, and explain how law enforcement can trace threats. The educational component serves as a deterrent by raising awareness among students.

**SAM-911:** This innovative tool enhances public safety by preventing swatting calls from reaching 911 centers. SAM-911 uses advanced pattern recognition capabilities to distinguish between genuine emergency calls and those intended to deceive or cause harm. This ensures that emergency resources are efficiently allocated to actual emergencies. SAM-911 protects various sectors, including:



## **HOMES**

Reduces the risk of unnecessary emergency responses that can lead to hazardous situations.



## **POLITICIANS AND POLITICAL GROUPS**

Safeguards individuals involved in the political process from being targeted due to their public roles or political beliefs.



## **GOVERNMENT OFFICES**

Maintains the security of crucial public services and institutions.



## **SCHOOLS**

Protects educational environments from swatting calls directed at the 911 center.



## **PLACES OF WORSHIP**

Keeps religious and communal spaces safe from false threats called into the 911 center.



## **STORES AND OTHER GROUPS**

Enhances the safety of public and commercial areas by preventing swatting attempts.

We are the sole source vendor for swatting prevention in the United States, with national contracts that allow schools and 911 centers to purchase our products without issuing RFPs.

## 9 Conclusion

Preventing school threats is not just about maintaining the continuity of instructional hours; it's about safeguarding the mental health and well-being of the entire school community. By focusing on prevention, we ensure that schools remain safe havens for learning, free from the fear and disruption caused by threats. Our products are at the forefront of this preventive approach, providing schools with the tools and support to protect their students and staff.



# 10 Appendix

SAM Database

5-3-2023



## Anatomy of a School Threat

Event	Students	LostHours	Total Lost Instructional Hours
Actual Threat	1000	1	1000
Parents pick up student	200	3	600
Students stay home next day	200	6	1200
<b>Total</b>			<b>2800</b>
<b>Net Students Days</b>			<b>467</b>

A 1 hour threat is equivalent to closing the school for 1/2 a day.

It is assumed that the numbers will be higher based on the age of the student.  
 Example: More elementary parents will pick up the student and keep them home

If no suspect is identified it is assumed the numbers will be higher.

If the school fails to communicate effectively with parents the number will be higher.  
 If a threat interrupts a period and ends during another period the cost could be higher.

**The following is based on limited data, we are hoping to collect more data so we can have a more accurate estimate.**

**Our current numbers only include the actual threat so the number we are publishing are likely to increase.**

## Draft paper on the Mental health costs of Swatting

### Impact of Non-Academic Stressors on Student Learning and Mental Health

*This is the initial research by Don Beeler; additional authors with expertise in adolescent mental health and learning have begun to review and research this report. The conclusion in the report may change as additional authors opine and a peer review has been completed.*

#### Introduction

Non-academic stressors such as swatting, bomb threats, and shoottong threats can profoundly affect some students' learning capabilities and test performance. These events can lead to increased feelings of loneliness and distress, which are strong predictors of mental health issues in students (McIntyre et al., 2018). High-stress levels can disrupt students' internal and external environments, leading to physiological changes that affect their ability to focus and retain information. Establishing strong social connections and minimizing stress from non-academic events can help reduce their negative impact on learning and mental health.

#### Reference:

McIntyre, J. C., Worsley, J., Corcoran, R., Harrison Woods, P., & Bentall, R. P. (2018). Academic and non-academic predictors of student psychological distress: The role of social identity and loneliness. *Journal of Mental Health*, 27(3), 230-239. DOI | PubMed

#### Trends in Student Anxiety Levels

Historical data on student anxiety levels is limited, but certain studies provide insights into trends over time. Twenge (2000) examined changes in anxiety and neuroticism among birth cohorts from 1952 to 1993, finding a general increase in anxiety levels over the years, particularly among young adults. More recently, Dykxhoorn et al. (2023) observed that the incidence of common mental disorders, including anxiety, significantly increased in the UK between 2000 and 2019, with rates more than doubling for individuals aged 16-24. These findings indicate a notable rise in anxiety levels among students, especially in younger age groups.

#### References:

Twenge, J. M. (2000). The Age of Anxiety? Birth Cohort Change in Anxiety and Neuroticism, 1952-1993. *Journal of Personality and Social Psychology*, 79(6), 1007-1021. DOI

Dykxhoorn, J., Osborn, D., Walters, K., Kirkbride, J., Gnani, S., & Lazzarino, A. (2023). Temporal paterns in the recorded annual incidence of common mental disorders over two decades in the United Kingdom: A primary care cohort study. *Psychological Medicine*, 1-12. DOI

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## Draft paper on the Mental health costs of Swatting

### Recent Studies on Student Anxiety

A study by Wiley suggests that in recent years, the percentage of students struggling with anxiety has increased from 13.59% to 59%. Past studies also indicate that younger students are more prone to anxiety than older students, suggesting that the actual number of students experiencing anxiety could be higher than estimated.

### Reference

Wiley Press Release on Mental Health Issues Among College Students Post-Pandemic

### Lost Instructional Time Due to Mental Health Issues Stemming from Swatting and Other School Threats

This report takes a conservative approach and suggests that an average of 36.30% of K-12 and college students are negatively impacted by the stress of a threat, resulting in a lower ability to benefit from instructional hours and a direct impact on test scores if taken during a time of a non-academic stressor. This new average is derived from taking the old average of 13.59% and the recent average of 59% and calculating a new average:  $(13.59\% + 59\%) / 2 = 36.30\%$ . With this updated average of students prone to anxiety, the average amount of lost instruction per student due to a swatting event is calculated to be 2.18 hours. This calculation assumes a 100% loss of comprehension for students with anxiety in an educational environment that involves testing to determine mastery of a subject. Any significant negative impact on retention could dramatically impact test scores, and even a 50% decrease in retention could result in a failing grade. Therefore, we use a 100% impact on learning ability as a conservative estimate until research is available to provide a more exact measure. This assumption allows us to calculate an average cost per student for lost instructional time.

### The National Average Cost of Instruction

The national average cost of one hour of instruction for K-12 in the United States is approximately \$12.21 per hour, based on the annual per-pupil expenditure divided by the total instructional hours in a school year. This calculation is based on the average per-pupil expenditure of \$13,187 for the 2019-2020 school year, as the National Center for Education Statistics (NCES) reported, assuming a typical school year consists of 180 days with 6 hours of instruction per day

### Reference:

National Center for Education Statistics. (2021). Digest of Education Statistics: 2019-2020. Table 236.75. NCES Table 236.75

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## Draft paper on the Mental health costs of Swatting

### Conclusion

The impact of non-academic stressors, such as swatting and other school threats, on student learning and mental health is significant. Our analysis suggests that these stressors negatively impact 36.30% of K-12 students, leading to an average loss of 2.18 instructional hours per student per event. This loss of instructional time, coupled with the assumption of a 100% impact on learning ability due to anxiety, can have profound implications for student academic performance and overall well-being. Preventing threats eliminates this loss and the anxiety associated with them. When we look at the total cost of a school threat, we must add the national average cost per student of \$26.61. Finding solutions that prevent threats has always been the best outcome, and we can now add additional benefits to what prevention is worth. The findings underscore the importance of addressing mental health issues in educational settings and the need for effective interventions to mitigate the impact of non-academic stressors on students. Schools and policymakers must prioritize mental health support and create safe, supportive learning environments to enhance student resilience and academic success. As research in this area continues to evolve, it will be crucial to refine our understanding of the precise impact of anxiety on learning ability and to develop targeted strategies to support students affected by anxiety and other mental health challenges. It also opens a new discussion on how to remediate the lost instructional hours if a threat occurs. The goal is to ensure that all students have the opportunity to thrive academically and personally despite the challenges posed by non-academic stressors.

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