Student Attempts of Violence Following a School Threat Assessment

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INTRO

Behavioral threat assessment and management ("threat assessment") is an approach to violence prevention used by school psychologists to identify, evaluate, and manage the risk of targeted violence. Recommended for more than two decades, 60% of U.S. schools have a threat assessment team as of 2020[1].

It is widely acknowledged that young people frequently make impulsive, dramatic, or emotionally charged statements construed as threats, but most cases never escalate to violent attacks[2]. There is little research on how often threats that come to the attention of a threat assessment team are attempted and what characteristics are associated with a threat attempt[3]. This study examined the prevalence rates and associated characteristics of attempted violence in schools following a threat assessment.

NASP practice standards support the appropriate use of threat assessment and emphasize the key role that school psychologists play on threat assessment teams. School threat assessment teams using the Comprehensive School Threat Assessment Guidelines (CSTAG; Cornell, 2018) classify student threats into four categories: no threat, transient, serious substantive, and very serious substantive. "No threat" means that the team concluded there was no legitimate threat to harm someone (such as a false rumor). Transient threats are typically an expression of humor or emotion that can be easily resolved and are considered at lower risk of an attack. In contrast, substantive threats are considered higher risk because the student is judged to have a serious and sustained intent to do harm. Substantive threats to fight are labeled serious and more severe actions (e.g., shoot, stab, kill) are labeled very serious.

The research questions for the current study are 1) How often students attempt an attack after making a threat and 2) Whether threats judged to have more serious intent are more likely to be attempted.

METHOD

This is an archival study of case records maintained by school threat assessment teams in Florida. The Florida Department of Education mandated the use of CSTAG in all public schools in 2020 and requested that each district volunteer case data for the 2021-2022 school year, but most of Florida's 67 districts declined, noting that they had recently started using CSTAG and were burdened with recovery from the pandemic. Thus, the sample consisted of 621 threat assessment cases from approximately 140 schools in 21 public school districts and 2 university lab schools, reflecting a 30% state participation rate.

Schools reported 289 (48%) elementary, 184 (30%) middle, and 132 (22%) high school cases. Grade level was missing from 7 cases. The racial breakdown was 63% White, 23% Black, 9% Hispanic, and 5% other. About 75% of students were male. Ages ranged from 4 to 20 years old *(M* = 11, modal = 13).

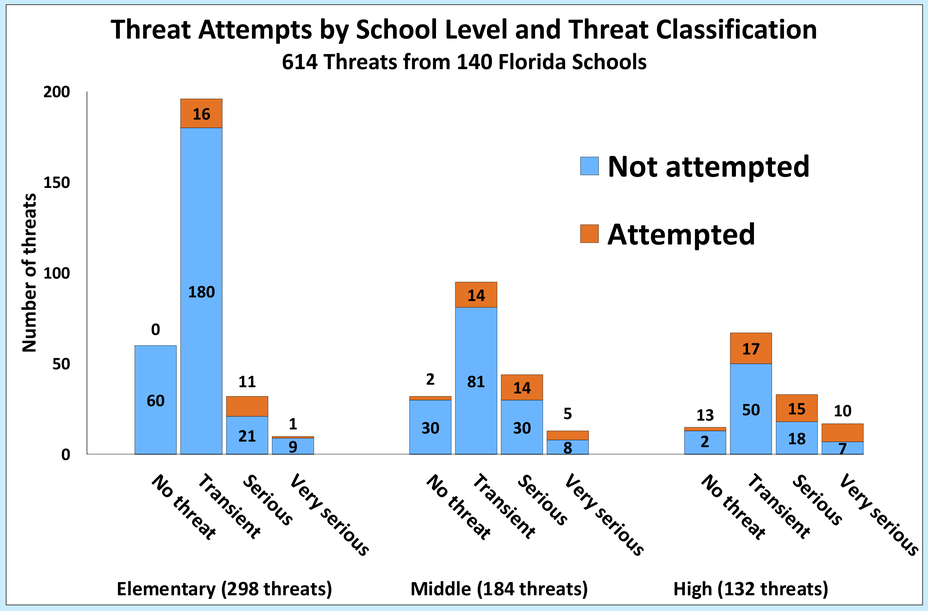
A hierarchical logistic regression model investigated the relationship between perceived threat intent and likelihood of a threat attempt. At step one, a fixed effect model[4] was used to account for the nesting of students within school districts. At step two, threat classification, target (student or staff), and demographic control variables (gender, race, special education status through an IEP or 504 plan, and grade) were entered.

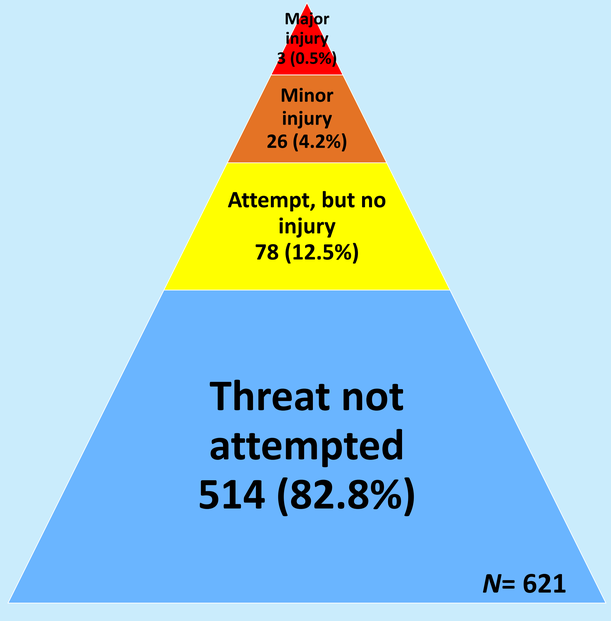
Most (83%) threats identified for a threat assessment are not attempted, but threats judged to have serious intent (substantive) are about 4x more likely to be attempted than non-serious (transient) threats.

Threat Outcome by School District

District (Enrollment)	Threat cases		
	Total	Not attempted	Attempted
A (28,000)	118	92	*26
B (3,000)	10	10	0
C (2,000)	1	1	0
D (15,000)	37	33	4
E (10,000)	1	0	1
F (2,000)	18	16	2
G (3,000)	10	10	0
H (2,000)	24	24	0
I (2,000)	3	3	0
J (33,000)	1	1	0
K (5,000)	29	27	2
L (18,000)	12	12	0
M (32,000)	82	77	5
N (199,000)	6	4	2
O (3,000)	72	40	*32
P (28,000)	40	39	1
Q (6,000)	63	48	15
R (3,000)	17	13	4
S (1,000)	1	1	0
T (2,000)	27	16	11
U (10,000)	49	47	2
Total (407,000)	621	514	107

Note. Enrollment rounded to nearest 1,000 students. *2 SD above the mean of attempted threat (*M* = 5.10, *SD* = 8.88)





Logistic Regression of Threat Attempts

	Total cases	Attempted cases (row %)	*OR*	95% CI
Gender				
Male[a]	458	64 (14.0%)		
Female	163	43 (26.4%)	*2.25	[1.18, 4.31]
Race				
White[a]	389	50 (12.9%)		
Black	143	41 (28.7%)	1.75	[0.86, 3.56]
Hispanic	54	9 (16.7%)	0.87	[0.28, 2.66]
Other	35	7 (20.0%)	* 4.38	[1.29, 14.91]
Special Education				
No IEP or 504 Plan[a]	279	49 (17.6%)		
Has IEP or 504 Plan	324	58 (17.9%)	1.40	[0.76, 2.61]
Grade Level				
Elementary[a]	298	28 (09.4%)		
Middle	184	35 (19.0%)	1.34	[0.63, 2.83]
High	132	44 (33.3%)	*** 3.81	[1.84, 7.86]
Target of threat				
Student	510	81 (15.9%)	2.57	[0.68, 9.71]
Staff	89	23 (25.8%)	*3.77	[1.22, 11.67]
Classification				
No threat[a]	110	4 (03.6%)		
Transient	360	47 (13.1%)	**10.57	[2.23, 50.09]
Serious substantive	111	40 (36.0%)	***26.37	[5.50, 126.60]
Very serious sub.	40	16 (40.0%)	***40.04	[6.86, 233.55]

Note. *N* = 621. *OR* = Odds Ratio. CI = Confidence Interval. IEP = Individualized Education Plan. [a]Reference group. *$p < .05$ *$p < .01$ ***$p < .001$

RESULTS

We found that 17.2% (*N* = 107) of threats made in schools were followed by an attempted attack. Within these cases, 69 were averted (11%) and 38 were carried out (6%). Most cases did not result in any injuries, but 26 minor injuries (4%; e.g., bruise, bloody nose) and 3 serious injuries (0.5%; e.g., broken bone, hospitalization) occurred. The number of attempted threats varied greatly by school district but averaged between 2 and 5 attempts (*M*=5.10, *SD*=8.88, median =2)[5].

We found that threats classified as transient (*OR* = 10.57, *p* = .003), serious substantive (*OR* = 26.38, *p* < .001), and very serious substantive (*OR* = 40.04, *p* < .001) were significantly more likely to be attempted than non-threats. A post-hoc analysis examining the transient-substantive distinction found that substantive classification was still significantly associated with a threat attempt (*OR* = 4.38, *p* < .001). Female gender (*OR* = 2.25, *p* = .01), other racial identity (*OR* = 4.38, *p* = .02), high school grade (*OR* = 3.81, *p* < .001), and staff target (*OR* = 3.77, *p* = .02) were also significantly associated with a threat attempt.

DISCUSSION

While most threats in this sample were not attempted, the proportion of attempted attacks (17.2%) is much higher than in previous studies (i.e., 2.5%[3], 3%[6]). Possible explanations for this include the inexperience of school threat assessment teams, as well as possible sampling bias or participant coding errors in data submission.

Almost half (*N* =47) of the attempted threats had been classified as transient, meaning that the team thought the case was resolved and did not require preventive action (error rate = 13%). Of these 47 cases, 35 were from just three school districts. Additional qualitative information about these cases was not available. These results suggest a need for training in assessment and classification of student threats. Anecdotally, it is possible some districts coded a threat as attempted when it referred to a fight that was the impetus for the threat assessment and no subsequent fight took place.

Nevertheless, the relationship between serious threat intent and a threat attempt was supported. Compared to non-threats, serious threats were 27 times and very serious threats were 40 times more likely to be attempted. Further investigation of the transient-substantive distinction found that substantive threats were about 4 times more likely to be attempted than transient threats.

Study limitations include the need for a larger and more representative sample. Future studies should consider ongoing data submission and collaboration with participating schools, as well as following student threat cases across multiple school years. Future studies should also consider qualitative methods for the small sub-set of cases that resulted in serious injuries. This study is part of a larger investigation that examined other factors, such as services delivered to students and equity of disciplinary and law enforcement actions.

The variations in attempt rate suggest the need to examine the quality of training and implementation fidelity. Nevertheless, few threats were attempted and very few injuries occurred. Overall, these results support the utility of threat assessment as a method for school psychologists to help maintain school safety.

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FOOTNOTES: [1]Wang et al. (2022). *Crime, Violence, Discipline and Safety in U.S. Public Schools in 2019-20: Findings From the School Survey on Crime and Safety.* U.S. Dept. of Education. [2]Nekvasil & Cornell (2012). Student reports of peer threats of violence: Prevalence and outcomes. *J. Sch. Violence.* [3]Burnette et al.(2018). The distinction between transient and substantive student threats. *J. Threat Assessment & Management.* [4]Huang (2016). Alternatives to multilevel modeling for the analysis of clustered data. *J. Exp. Educ.* [5]Attempts for two districts were more than two standard deviations above the mean and accounted for 54% of all attempted threats in the sample. A re-analysis omitting these two outlier districts did not change the pattern of significant classification findings but did reduce the threat attempt rate to 11.4%. These districts also accounted for half of the attempted threats that were previously mis-classified as transient. [6]Cornell & Maeng (2020). *Student Threat Assessment as a Safe and Supportive Prevention Strategy: Final Technical Report.* University of Virginia.