



ANDRUS CENTER FOR LEARNING & INNOVATION RESEARCH BRIEF



CONTRIBUTORS TO RESTRAINTS AND HOLDS IN ORGANIZATIONS USING THE SANCTUARY MODEL

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Organizations working with troubled children have long relied on physical restraints and or holds to prevent a child from hurting himself or others. A three year study of organizations using the Sanctuary Model showed reductions in physical restraints on average of 52.3% after the first year of implementation.

In an effort to better understand the reduction, linear regression analyses were conducted to determine what variables contributed to the number of Restraints/Holds (R/H) reported by the facilities participating in the Andrus Longitudinal Study of Sanctuary Implementation. These analyses compared variables contributing to R/H at baseline (approximately 3 months following Sanctuary leadership trainings) to the second wave of data collection (approximately 12 months after baseline data was collected).

Organizations using the Sanctuary Model experience a significant decrease in the number of physical restraints within the first year of implementation. Prior to implementation, client to staff physical aggression contributed greatly to the number of restraints and holds. After twelve months of implementation, the relationship between client to staff physical aggression is less significant; instead, property aggression becomes a greater contributor to the number of restraints and holds.

REDUCTIONS IN PHYSICAL RESTRAINTS

Of the child-serving organizations examined in the Andrus longitudinal study, seven reported decreases in number of reported R/H. Of those 7 facilities, three exhibited over an 80% decrease in the number of restraints, two had over a 40% drop in restraints, one exhibited a 13% decrease and lastly one had a 6% drop in restraints. These decreases are detailed in the following table:

Facility ¹	Restraint Totals by Data Collection Wave		
	Baseline	12 months later	Percent decrease
A	81	11	86 %
B	468	75	84 %
C	17	2	88 %
D	50	47	6 %
E	187	103	45 %
F	666	580	13 %
G	842	472	44 %

Examination of individual facilities is helpful in understanding the import of these changes. Facility G, a school which participated in the longitudinal study, serves students, grades K - 9, with emotional challenges or autism. From baseline to one year later, the number of physical restraints at facility G fell 44% from 842 to 472 per year. This decrease, with approximately the same number of students, occurred a little over one year after Sanctuary implementation. An even greater decrease was observed in a residential treatment facility for the juvenile justice population – facility B. During a similar interval, this facility saw an 84% decrease in restraints with 468 at baseline and 75 twelve months after implementation of the Sanctuary Model. This decrease is striking given the particular challenges of working with children who have been identified by and processed through the legal system.

The Andrus Center for Learning & Innovation (ACLI) provides professional leadership on issues, practices and policies affecting vulnerable children and families.

The ACLI is housed and operated by the Andrus Children's Center, a private, non-profit community agency that provides assessment, treatment, education and preventive services for children and their families in residential, day and other restorative programs.

The Sanctuary Model is a trauma-informed model for treatment and organizational change.

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¹ Facility names have been removed to preserve their privacy.

BASELINE: Client to Staff Physical Aggression Contributes Greatly to R/H

For the first set of regression analyses multiple variables contributing to R/H were examined. A review of the variables included in the analysis revealed that some variables (e.g. total number of clients served) had minimal impact on R/H. These variables were excluded and regression analysis continued with the following variables:

- Physical Aggression (client to client)
- Physical Aggression (client to staff)
- Physical Aggression (client on property)

During baseline data collection, Physical Aggression (client to staff) contributed the most to the number of R/H (Beta = 1.56) at a statistically significant level ($p = .001$). This means that as the number of incidents of Physical Aggression (client to staff) increased, so did the number of R/H. In addition, Physical Aggression (client on client) also contributed to the number of R/H to a statistically significant degree ($p = .005$). However, the contribution was in the opposite direction ($B = -0.55$). As the number of incidents of Physical Aggression (client on client) increased, the number of R/H decreased.

AFTER ONE YEAR OF IMPLEMENTATION: Property Aggression Contributes Greatly to R/H

Twelve months later during the second round of data collection, these same variables were examined in relation to the number of R/H reported. At this time, none of the variables examined contributed to the number R/H to a statistically significant level.

Thus, one year after the implementation of the Sanctuary Model, there was a significant decrease in the relationship between clients' person-focused aggression (whether to staff or peers) and the number of R/H reported. It would appear that staff's use of R/H with clients was significantly less impacted by clients' person-focused aggression. It is possible that the Sanctuary Model may have helped staff members understand clients' aggressive acting out as trauma-based behavior and decreased their own aggressive responses (R/H).

A second round of regression analyses were conducted with variables not considered before ('Clients' Physical Aggression toward property' and 'Property Damage'). When these variables were included in the analyses, with the aforementioned person-focused aggression, the results remained the same for person-focused aggression. Specifically, at baseline, Physical Aggression (client to staff) contributed the most to the number of R/H (Beta = 2.05) at a statistically significant level ($p = .004$). Similarly, Physical Aggression (client on client) contributed to the number of R/H to a statistically significant degree ($p = .025$) in the opposite direction ($B = -0.57$). Aggression on property and Property Damage did not significantly contribute to the number of R/H.

However during the second wave of data collection, 12 months later, clients' person-focused aggression (toward peers or staff) did not significantly contribute to the number R/H. Rather, at this time, the number of incidents of Property Damage significantly ($p < .001$) contributed to R/H ($B = 1.01$).

Once again, twelve months after the implementation of the Sanctuary Model, there was a significant decrease in the relationship between clients' person-focused aggression (whether to staff or peers) and the number of R/H reported. But, clients' aggression on property did impact the number of R/H reported. Two possible explanations exist. First, clients may have turned their aggression from people to property. This could be viewed as clinical improvement as clients may have chosen to hurt people less and redirected their anger towards inanimate objects. Second, staff members continued to utilize R/H due to possible harm to clients as their aggression (toward property) was severe enough to cause damage.