

An Analysis of the Restraint Event and its Behavioral Effects on Clients and Staff

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Programs serving troubled children continue to grapple with difficult issues concerning the purpose, efficacy, and necessity of physical restraint and other coercive interventions. The authors revisit the issues and motivations surrounding restraint and offer a behavior analytic perspective on the physical restraint cycle and the factors that tend to support its recurrence.

We recoil at the headlines: "Deadly Restraint" (Weiss, 1998), "Fatal Hugs" (Boyle, 1999), "Troubled Youth's Death Follows Improper Restraint" (Breen, 2000). But despite the horrific stories these headlines summarize and the recent passage of a new public law (Public Law 106-301, 2000) intended to restrict its use, physical restraint and other coercive interventions continue to be widely practiced in programs that serve behaviorally difficult clients. The explanation for this reality is, at least at first blush, both logical and compelling: What else can a direct care worker do in the face of client outbursts that threaten the immediate safety of another child, the caretaker, or the client himself or herself?

Upon closer examination, however, an interesting paradox is apparent: At the same time many agencies persist in their regular use of restraint with oppositional, defiant, or aggressive clients, other similar programs and agencies serve equally difficult clients in similar care settings without danger to clients or staff, without behavioral chaos, and without the routine use of restraint, forced seclusion, or other coercive interventions. The occasional gravity of the outcomes of restraint would seem to invite, if not demand, a more vigorous exploration of this paradox. This article will focus on two key factors that may critically influence agency choices relating to the use of physical restraint with youthful clients. These are: 1.) Agency understanding of the physical restraint event and its behavioral effects on both the restrained client and the staff

applying the restraint, and; 2.) Agency awareness of, and access to, effective and cost-efficient treatment alternatives to coercive interventions. As used here, *agency* refers to what has been called institutional or agency "headset" (see Goren, Abraham, & Doyle, 1996, and Jones & Timbers, in review), in which the philosophical views and attitudes of agency administrators about the efficacy of restraint are communicated, in the form of informal expectations or formal policy, to direct care staff who then implement restraint practices based on those expectations or policies.

What Happens When We Restrain Children?

Old arguments abound concerning the therapeutic value of physical restraint. Many of these, whether valid or not, seem thoughtfully and genuinely offered (see review by Bath, 1992). Others concern a persisting and often seemingly convenient failure, by agency administrators to distinguish correctly between physical restraint and therapeutic holding. To illustrate, the following statement appeared just before Christmas 2000 in a fundraising letter mailed to prospective donors by a North Carolina child caring agency that only months before had its social services licensure and its national accreditation suspended following the death of a client during physical restraint: "(First name of client) needed to be 'therapeutically held' for her own safety six times during her first two weeks with us." The internal quotes are those of the agency but,

even beyond the statement itself, exemplify a level of confusion over the difference between protective restraint and planned therapeutic holding. The key distinction, of course, is that therapeutic holding (Cline, 1992) is a *pre-planned* treatment event and physical restraint is applied spontaneously and *contingent upon* the client's unfolding behavior.

But apart from the old fights and the latter semantic side-tracks, all agencies implement their choices about the use of physical restraint with implicit views or beliefs about two things. The first is that physical restraint can and will interrupt or contain the defiant or aggressive client behavior to which it is addressed. Most would agree that it usually does. Agency choices about using restraint are also predicated, however, on a second assumption about the likely effect of the physical restraint event on the future oppositional behavior of clients exposed to that procedure. This second assumption, in the behavior analytic framework, concerns an agency's belief about whether or not physical restraint serves as a *punisher*. Note that within this framework the term "punisher" has no disciplinary or retributive connotation. Rather, it arises from the Skinnerian definition of punishment, i.e., any stimulus event (in this case, physical restraint) which, when made contingent upon a response (client defiance/aggression), has the effect of weakening or decreasing the future likelihood of that response (Azrin & Holz, 1966). It would seem that most agencies choosing to use physical restraint as a standard intervention with dangerous client behaviors do tacitly embrace this conceptualization of the effect of restraint and presume, further, that it will at least have no ill effects if client injury can be avoided. There is, in fact, some conjectural support for this posture in the literature. Among others, Gutheil (1978) and later Cotton (1989) have argued that forcible staff control may not only reduce client aggression, but also encourage more adaptive client behavior.

Other researchers have discounted the therapeutic value of all coercive interventions out of hand, and some have brought data to bear on their arguments. Patterson and Forgatch (1985), for example, observed that in client-therapist interactions, negative therapist behaviors seemed to increase the likelihood of client noncompliance, while positive therapist responses significantly increased the propensity of the client to comply. Similarly, Natta, Holmbeck, Kupst, Pines, and Schulman (1990) found that coercive, on-ward staff interventions in a psychiatric setting were predictably associated with increases in oppositional patient responses. And Goren, Singh, and Best (1993), also studying seclusion and restraint in a psychiatric inpatient setting, reported high rates of both procedures with no apparent reduction in the clients' propensity to engage in the antisocial behaviors that led to their use.

Goren, et al. (1993), following the earlier lead of Patterson (1976) and Garrison, Ecker, Friedman, Davidoff, Haerberle,

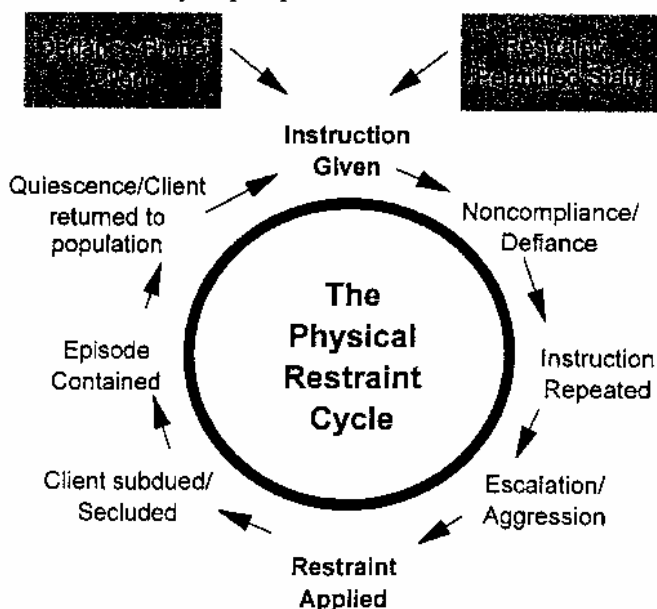
and Wagner (1990), postulated an "aggression-coercion" cycle to account for their findings. However, neither these nor other studies have attempted a parsimonious specification of the mechanism by which coercive interventions may maintain or strengthen the oppositional/defiant behavior of clients in care. We believe the controlling mechanism can be articulated within the framework of behavior analytic theory and feel it may prove enlightening, if not essential, in motivating headset change among agencies prone to the regular use of coercive interventions.

The Nature of the Restraint Event and the Physical Restraint Cycle

We propose that staff restraint in the face of aggressive/oppositional/defiant client behavior in residential child care is a transaction between the client and the staff involved in which the behavior of all participants is supported, strengthened, and perpetuated by various reinforcers, both during the restraint event and following it. As we proceed with this analysis, keep in mind that we are again using the terms *reinforcer* and *punisher* in the strict Skinnerian sense. That is, a reinforcer is any stimulus which, when made contingent upon a response, has the effect of strengthening (increasing the future likelihood of) that response, and a punisher is any stimulus which effectively weakens (reduces the future likelihood of) responses upon which it is applied contingently (Holland & Skinner, 1961).

The concept concerns supporting events that occur during and after staff/client activities that constitute a typical restraint episode as depicted in Figure 1. The only pre-restraint conditions are those commonly present in

Figure 1. The physical restraint cycle: A behavior analytic perspective



residential care: 1.) A client with a history of defiant/aggressive behavior; and, 2.) A staff member authorized to apply restraint at his/her discretion (irrespective of the amount or quality of that staff's training in restraint procedures). Proceeding from the top of the diagram clockwise, we see that most restraint episodes are set in motion either by a child entering the staff's purview already aggressing or oppositional, or by a staff directive or instruction to the client, predictably followed by noncompliance and possible defiance by the client. The staff member then either repeats the original instruction or offers additional directives concerning the client's defiance, perhaps with an angry voice tone and/or a physical prompt, to which the client responds with escalated defiance and/or aggression. Physical restraint of the client by the original staff and typically any other staff present ensues at the bottom of the diagram. The client is eventually subdued and/or successfully placed in seclusion, and the episode eventually winds down with no new skill development by the client and with nothing changed by staff to avert subsequent defiance/aggression by the client. (The restraint protocols of many agencies do, however, call for a counseling or debriefing session with the youth involved.)

Now, let us consider the more subtle events, both during and following the restraint episode that may be reinforcing (thus maintaining or strengthening) the behavior of the principals in this scenario, beginning with the client. First, and early in the cycle, the client enjoys the reinforcer of controlling the behavior of the original staff. Defiance-prone children are masters of the adult-child power struggle and know precisely what staff buttons to push to initiate those struggles. By the three o'clock position on the

diagram in Figure 1, the client has accomplished this. Then, at the point of actual restraint, the client has produced a powerful dose of another well-documented reinforcer; i.e., s/he has captured the undivided attention, albeit negative, of every adult in the vicinity. Finally, after being subdued/secluded, the client may experience reinforcement in the form of tension reduction near the end of the episode.

Client reinforcers following the restraint event, during the period described as "quiescence," are less easily specified temporally but can be enumerated. They center primarily on peer social reinforcement and include such things as peer sympathy and adulation, image or "rep" as a renegade, image as the suffering hero, and the like.

During presentations to direct care staff concerning restraint as a reinforcing event, we have sometimes invited our audiences to suggest other possible reinforcers that may be associated with the restraint event. Some of their suggestions concerning client reinforcers are shown in the left column of Table 1.

On the staff side of the equation, things are different, but only slightly so. During the restraint event, the typical staff need to control intolerable client behavior is eventually satisfied, and all staff involved are ultimately rewarded by a cessation (or sequestering in seclusion) of those client behaviors—a classic example of *negative reinforcement* (again, from Holland & Skinner, 1961: Any stimulus which, when removed contingent on a response, has the effect of strengthening or increasing the future likelihood of that response). Additionally, there is the reinforcer of "winning"

Table 1.

Possible client/staff reinforcers associated with the physical restraint event, as proposed by direct care trainees in workshops aimed at breaking the restraint cycle.	
Possible Client Reinforcers	Possible Staff Reinforcers
Power/control	Power/control
Physiological high	Physiological high
Staff/peer attention	Ends the acting out of client (negative reinforcement)
Anxiety reduction	Restore safe environment/anxiety reduction
Physical contact	Reputation as "intimidator"
Sexual contact	Sexual contact
Escape from boredom on the ward	Peer recognition
Recreate chaotic family environment	Retribution (frustration-elicited aggression)
Victim image	Peer sympathy
Peer sympathy	Evidence of "we serve tough kids"
Opportunity to be aggressive	Spouse recognition/sympathy

the power struggle (forget for a moment that the battle will surely be waged again). Staff, like clients, may also be reinforced by a physiological high relating to tension reduction toward the end of the episode.

And as with clients, post-restraint staff reinforcers are mainly socially mediated. Those may include such things as colleague respect/admiration for "taking charge," "defusing a bad situation," "showing Johnny who's boss," as well as colleague or significant other sympathy for physical injuries, emotional distress, and the like. In fact, many residential programs point to their frequent need to use restraint and other coercive measures as evidence of the difficulty of the clients they serve; a kind of collective, "agency reinforcer" for using restraint. Other possible staff reinforcers that have been suggested by our workshop trainees are shown in the right column of Table 1.

We are not saying that staff (or clients, for that matter) would verbalize that they enjoy restraint or even think about it that way. Rather, we are proposing that for both staff and clients, the physical restraint cycle may well have a net reinforcing effect. Further, we are suggesting this concept as the operating mechanism by which physical restraint is self-perpetuating in many child care facilities. More important, however, if this analysis is correct, it suggests strongly that the physical restraint of defiant/aggressive clients will have the primary effect of making them more prone to defy and aggress against adult caretakers, if not adults in general, both during and after their periods of residential care.

But what if our hypothesis here is off mark with some children, and physical restraint is, in fact, a functionally punishing event for such clients? First, of course, we would expect clients experiencing restraint to gradually abandon those antisocial behaviors that precipitated the intervention. But we submit that care providers would be not much better off in that they would be faced with all of the predictable side-effects associated with the use of punishment (Azrin & Holz, 1966), namely, escape, avoidance, emotional responses incompatible with learning, conditioned suppression of all client behavior, and pain-elicited aggression (Ulrich & Azrin, 1962), among other nasty things. Our point: Physical restraint and related coercive interventions, be they reinforcing or punishing to those participating in them, invite a lose-lose outcome for everyone.

Agency Awareness of/Access to Effective Alternatives to Coercive Interventions

Let us presume, by way of conclusion, that the foregoing discourse has turned the head of one or another agency administrator heretofore convinced that physical restraint

was either an advisable or a necessary intervention. That administrator's first question will be: What shall we do instead? It is a reasonable question, and there are a few good answers. First, our analysis would suggest that the simple adoption of an administratively supported policy that condones restraint only as a last resort, even without benefit of other programming changes, might well have the effect of gradually minimizing the regular need for that and other coercive procedures.

Second, we would recommend an examination of several studies that have forwarded and expanded upon an eco-behavioral approach to child care, emphasizing attention to institutional "setting events" affecting untoward client behavior, consideration of social events and contexts surrounding staff/client interactions, as well as agency sensitivity to issues relating to institutional history, staff ideology, client family involvement, and organizational policy as those may affect staff-client conflict (Singh & Aman, 1990).

Third, we would suggest a look at our own recent study that assessed the effects of comprehensive, skill-based training and treatment programming on the frequency of physical restraint, seclusion, and critical incident reports in two residential care programs whose staff had previously been trained only in the proper use of restraint measures (Jones & Timbers, under review; Timbers & Jones, 2000). One such model of treatment, called the Teaching-Family Model, or TFM (see review by Daly & Dowd, 1992), has effected virtually restraint-free environments for behaviorally difficult clients in group homes, institutional settings, treatment foster care, family preservation, and supported adoption settings for almost 30 years. The TFM is called skill-based in that staff are trained to focus their efforts on correcting—rather than simply containing or suppressing—the problem behaviors of clients in their charge. For example, clients in agencies using the TFM are actively taught appropriate ways to follow instructions, accept "no" from teachers and staff, calmly accept corrective consequences when those are necessary, and the like. Additionally, that model is proactive in that direct care staff are trained to expect difficult client behaviors, to "pre-teach" to those behaviors before they occur, and to help clients replace socially inappropriate behaviors with alternative behaviors that are incompatible with the problem behaviors. In agencies using the TFM, rare instances of physical restraint are viewed as evidence of deficiencies in treatment planning and implementation. Treatment plans of children requiring restraint are immediately reviewed and revised specifically to avoid the subsequent necessity of restraint with them. A nationwide network of training, consultation, and evaluation services sites offer instruction and support in the use of the Teaching-Family Model.

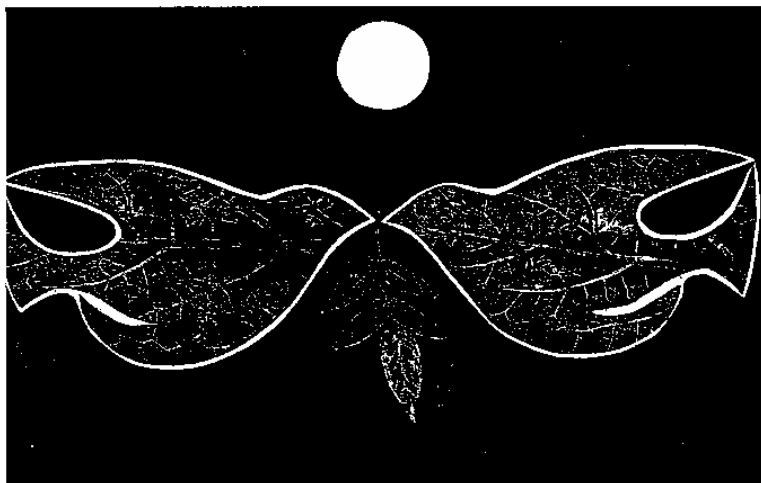
We would offer one last thought on the subject of the importance of comprehensive treatment programming and

staff training. It is our experience that direct care staff, particularly in the face of crises involving client behavior, tend to do exactly what they've been trained to do. If their training has been limited, as is commonly the case, to the proper use of physical restraint protocols, those staff will be highly likely to use those procedures in the face of seriously untoward client behavior and will fail to do the many things that can be done to minimize such client behavior in the first place. Conversely, the same care staff, additionally trained and supported in the application of effective client behavior correction techniques, will be highly likely to apply those methods to avoid the need for, or as an alternative to, physical restraint.

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