

## A Scale to Measure Restrictiveness of Living Environments for Troubled Children and Youths

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*Despite concerns about the restrictiveness of care and treatment procedures and settings for special populations, the concept of restrictiveness has seldom been defined or measured. This study describes the development of the Restrictiveness of Living Environments Scale (ROLES) for measuring the restrictiveness of residential settings for children and youths, including their own homes. Based on a literature review, the authors defined restrictiveness in terms of limits placed on freedom of movement or choice by the physical facility, by rules or requirements, and by conditions of entry and departure. The definition, along with a list of 27 residential settings for children, was sent to 389 child care professionals, who were asked to rate the restrictiveness of the settings on a 10-point scale, using a rating method designed to yield an interval scale. Ratings from 159 respondents, rounded to the nearest .5, were used to determine the relative position of the settings on the scale.*

In the past two decades agencies dealing with handicapped or troubled children have focused increasing attention on the restrictiveness not only of the environments where such children are placed but also of the procedures used to help them. The concern about restrictiveness is based both on court decisions (1,2) and on regulations such as those implementing the Education of All Handicapped Children Act (Public Law 94-142).

In education, restrictiveness is generally encompassed by the concept of mainstreaming or integration. In services to persons with developmental disabilities, it is encompassed by normalization or social role valorization, a term proposed by Wolfensberger (3). In corrections and in out-of-home placement of children, as in mental health services, the popular term is restrictiveness.

Concern about the restrictiveness of living and learning environments, and the programming within them, is usually highest when a youngster is about to be placed outside the home or when a treatment or education program is being planned. When a new placement is being considered, the available settings are weighed for the restrictiveness of the physical facility, the social environment, and the type of programming. After placement, when individual programming is planned,

the restrictiveness of specific procedures is considered. For both placement and programming decisions, it would be helpful to have a definition of restrictiveness and scales quantifying the restrictiveness of settings and procedures. Such scales could also be used in program auditing and evaluation.

Despite the recent attention to restrictiveness, no general definition of the concept seems to have appeared in the literature (4), although definitions of normalization (5) and of the restrictiveness of educational placements (6) have been formulated. In the many writings on restrictiveness, most authors apparently assume that its meaning is obvious or that it is beyond definition. However, because 300,000 to 500,000 youngsters are currently placed outside their families by public agencies (7) for reasons of abuse, neglect, incorrigibility, crime, and so forth, a definition of the restrictiveness of residential living environments is particularly needed. Only after restrictiveness is defined will meaningful quantification be possible.

A few studies, notably by Ransohoff (8,9) and Killebrew (10) and their associates, have attempted to define the dimensions of restrictiveness. The Ransohoff studies identified six dimensions: limitations placed on physical freedom, such as use of locked doors or seclusion; legal status of treatment, such as whether the treatment is entered voluntarily; time constraints, such as requiring a certain number of treatment sessions; independent use of finances and choice of living arrangements; level of antipsychotic medication; and use of such physical treatments as electroconvulsive therapy or psychosurgery.

Ransohoff and associates developed a scale of the restrictiveness of treatment based on these six dimensions for use in evaluation research on the treatment of psychotic adults. They provided 31 mental health professionals with examples illustrating various levels of restrictiveness under each of the six dimensions and asked them to rate both the relative importance of the six dimensions and the relative restrictiveness of each alternative within each dimension.

Our study was similar to the Ransohoff studies in that the purpose was to develop a measure of restrictiveness for use in program evaluation, and we also employed ratings of restrictiveness by relevant

professionals. However, we attempted to define restrictiveness for more general use and then to develop a scale quantifying the restrictiveness typically seen in settings for troubled children and youths. Such a scale can be used to evaluate whether the restrictiveness of services to a particular class of clients has been reduced over a certain time period. It can also be used to evaluate how much a particular program is reducing the restrictiveness of the youngsters' lives. Scales quantifying the restrictiveness of specific interventions or procedures would also be useful, but complex to develop and apply.

This study quantified the restrictiveness of 25 different settings in which children and youths live. Professionals experienced in placing or treating children and youths were surveyed and asked to rate the restrictiveness of each setting on a list, based on their experience and using the definition we provided. The final product was the Restrictiveness of Living Environments Scale (ROLES).

## Method

*Defining restrictiveness.* The first step in developing the scale was to formulate a definition of restrictiveness. To do so we studied articles and books to identify the dimensions of the living environments that authors viewed as defining restrictiveness. Often the dimensions were only implied. For example, an author might speak of a group setting as being more restrictive than the child's own home or a foster home without saying explicitly that nonfamily group living is generally more restrictive than living in a family. Some authors explicitly stated one or two dimensions, though seldom more. The most general dimension was the child's degree of freedom of choice in such areas as selecting friends, decorating his or her room, or deciding where to go or what to do.

To the degree that an environment constrained a youngster's choices or access to rewarding experiences or subjected him or her to aversive stimuli, it was considered to be restrictive. While both of these dimensions refer to the child's short-term rewards and punishers, another dimension had to do with long-term habilitation or development: the normality of the environment's opportunities, requirements, and constraints. All of these dimensions were used in our own definition. Planned, professional habilitation activities—that is, treatment, training, or education—were not included in our definition to avoid unnecessarily mixing the concept of restriction with the concept of habilitation.

The following definition resulted: a living environment can be made restrictive by three of its components—the physical facility, including its appearance (such as size and institutional look), its internal structure and equipment (such as locks, privacy

of bathing, and kinds of kitchen facilities), and the physical layout; the rules and requirements that affect free movement, activity, or other choice; and the voluntariness with which children and youths enter or leave the setting permanently.

Each of these three components make the setting restrictive to the extent that it does the following:

- Limits the frequency, variety, or quality of interpersonal family relationships involving the child as a permanent, integral member of a family.

- Limits the opportunities to engage in normal personal and family responsibilities, such as cleaning, cooking, managing an allowance, caring for the yard, and helping repair things.

- Limits personal choices such as the type of food to eat, when to eat, the temperature of the room, the decor of the room, personal clothing, and privacy.

- Limits the child's free choice of involvement in recreational activities such as watching a preferred television program or listening to preferred music, reading books, playing outdoor games, and bicycling.

- Limits the child's independence of movement within the setting's rooms and buildings (by locks or prohibitions), on the property, or in the community.

- Limits contacts with other environments, such as shopping, church, schooling outside the agency, and homes of friends or relatives.

- Limits the frequency, variety, or quality of social relations outside the family, with normal peers, adults, or younger children.

- Identifies the child as different (stigmatization) because neighbors or peers know that the child is in some kind of special care.

*Questionnaire content.* The definition was provided to respondents along with a statement of our purpose, which was, in brief, "to develop a quantitative measure of the restrictiveness of residential settings, especially child care and treatment settings." A cover letter asked the recipient either to complete the accompanying questionnaire or to pass it to someone else in the organization who was familiar with many care or treatment settings for youngsters and was likely to return it.

Enclosed with the letter and the definition was a list of 27 settings in which we had known children to live at some time before or after admission to treatment programs. Settings were listed in a random-like order, not according to their apparent restrictiveness. Respondents were asked to rate only those settings with which they were familiar, following very specific instructions. First, they were asked to read the list, find the least restrictive setting, and put a 0 in the box beside it. Second, they were asked to find the most restrictive setting and put a 10 in the box beside it. Third, they

were asked to find a setting halfway between 0 and 10 and put a 5 in the box beside it. Finally, they were asked to rate the remaining settings in relation to those three settings. Tie scores and decimals were explicitly permitted. Respondents were asked to return the questionnaire in an enclosed, stamped envelope.

*Survey procedure.* Two questionnaires were sent to directors of Pennsylvania agencies whose staff would be familiar with various child care and treatment settings. The agencies included 95 private child care agencies belonging to the Pennsylvania Council of Children's Services (PCCS), 34 county child welfare offices, 28 mental health-mental retardation offices in Allegheny County, five private child care agencies in Allegheny County that did not belong to PCCS, three hospitals, and the local youth detention center.

Recipients were asked to complete one questionnaire themselves and to ask someone under their direction to complete the second. Single questionnaires were sent to 42 juvenile court judges representing most counties in the state, nine supervisors of probation in Allegheny County, and six staff in the county legal aid-child advocacy office. In all, 389 questionnaires were mailed, all from West Virginia University so that any biases regarding our agency would not affect ratings.

## Results

Responses were received from 159 professionals, representing 41 percent of the sample. Many of the respondents appeared to take the task especially seriously. For example, 38 percent gave decimal ratings, 51 percent had changed two or more of their ratings (by erasure, cross out, and so forth), and 16 percent left two or more rating spaces blank, suggesting that they judged themselves unfamiliar with those settings.

The plurality of respondents (49 percent) were administrators; the next most frequent were supervisors (37 percent) and direct service staff (13 percent). Respondents were highly experienced. Thirty eight percent had 15 or more years' involvement with disturbed or disturbing children and youths, 27 percent had ten to 14 years, and 23 percent had six to nine years.

Table 1 presents the mean, standard deviation, and median rating of each setting. The standard deviation indicates how much raters disagreed; we deemed SD values of less than 2 acceptable because they indicated that approximately 67 percent of respondents' ratings were within 2 points of the mean value. The final Restrictiveness of Living Environments Scale (ROLES) rating in the fourth column of Table 1 consists of the mean ratings rounded to the nearest .5 value for simplicity. Where medians differ by as much as .5 from means, some users may prefer medians.

Predictably, the settings judged to be typically most restrictive were correctional facilities, which have locked doors, numerous rules restricting movement and activities, and few choices of food or decor. In the middle range were treatment-oriented settings, where there may still be many rules and other contingencies requiring certain behavior before one receives certain rewarding activities or materials. The group settings were consistently rated more restrictive than family settings, probably based on their lesser degree of normality and the greater number of rules that typify them. Least restrictive were family and independent living situations, in which rules are likely to be less rigidly or severely enforced and more individualized to the youngster's level of development, and in which the widest range of social, material, and activity rewards are usually available.

Two settings included in the questionnaire—the armed forces and homeless on the streets—were deleted from the final scale because they had standard deviations exceeding 2. The armed forces had mean and median ratings of 6.6 and 7, respectively, and a standard deviation of 2.3. Homeless on the street had mean and median ratings of 3.6 and 2.5, respectively, and a standard deviation of 3.6.

The poor agreement between raters on the restrictiveness of these two settings is not surprising. On the one hand, a youngster on the street has only the restrictions imposed by officers of the law and is not required to perform chores or attend school. On the other hand, the youngster is cut off from the rewarding and rehabilitative opportunities of family and is at risk of such aversive experiences as sleeping in the cold, being beaten up, and being forced into sex.

Although no one is coerced into entering the armed forces today, those who do so must comply with numerous rigid rules, have limited access to rewarding activities, must perform many aversive tasks, and are not free to leave. Further, the armed services are both a residential setting and a job, unlike other environments on the ROLES.

## Discussion

The ROLES scores are consistent with our observations of children's living environments and correspond closely to a scale that we had developed internally for program evaluation. Our rank orders of the ten environments on that scale were identical to those of the ROLES respondents, except that we had ranked supervised independent living as less restrictive than a relative's home. An ideal validation of the ROLES might involve direct measurement of the events and conditions found in a random sample of the same 25 living environments, using an empirically based scoring of these events and conditions that reflected their differential contribution to the restrictiveness of

Table 1  
Ratings by 159 professionals of residential settings for children and youths on the Restrictiveness of Living Environments Scale

Residential environment	Rating <sup>1</sup>			Final scale rating <sup>2</sup>
	Mean	SD	Median	
Jail	9.8	0.6	10.0	10.0
State mental hospital	9.0	1.0	9.0	9.0
County detention center	9.0	1.2	9.0	9.0
Youth correctional center	8.9	1.2	9.0	9.0
Intensive treatment unit	8.4	1.3	9.0	8.5
Drug-alcohol rehabilitation center (inpatient (inpatient))	7.8	1.5	8.0	8.0
Medical hospital (inpatient)	7.5	1.9	8.0	7.5
Wilderness camp (24-hour, year-round)	7.2	1.8	7.0	7.0
Residential treatment center	6.5	1.5	7.0	6.5
Group emergency shelter	6.0	1.7	6.0	6.0
Residential Job Corps center	5.7	1.8	6.0	5.5
Group home	5.5	1.7	5.0	5.5
Foster-family-based treatment home	5.1	1.5	5.0	5.0
Individual-home emergency shelter	4.9	1.5	5.0	5.0
Specialized foster care	4.6	1.4	5.0	4.5
Regular foster care	3.8	1.5	4.0	4.0
Supervised independent living	3.6	1.6	3.4	3.5
Home of a family friend	2.6	1.5	3.0	2.5
Adoptive home	2.6	1.6	2.0	2.5
Home of a relative	2.5	1.5	2.5	2.5
School dormitory	2.0	1.5	2.0	2.0
Home of natural parents, for a child	2.0	1.7	2.0	2.0
Home of natural parents, for an 18-year-old	1.9	1.8	1.6	2.0
Independent living with friend	1.4	1.5	1.0	1.5
Independent living by self	0.5	1.1	0.0	0.5

<sup>1</sup>Based on a scale from 1, least restrictive, to 10, most restrictive

<sup>2</sup>Based on mean ratings rounded to the nearest .5

the environment. While such an undertaking is possible, it is likely to raise more questions than it answers and is unlikely to be cost-effective. The ROLES is useful already; indeed several evaluators in North America are using it. However, the generalizability of our results to states other than Pennsylvania has not yet been evaluated.

The ROLES is a subjective interval scale, which permits users to calculate such statistics as the mean restrictiveness of a youngster's prior placements or postdischarge placements, or the mean restrictiveness for groups of youngsters. With ordinal scales, such calculations would be questionable, limiting their usefulness in program evaluation. We have used the ROLES in two kinds of evaluations that illustrate its efficiency. One is an annual follow-up of the youngsters discharged from each program of the Pressley Ridge Schools, which provide in-home family preservation services, emergency shelter, foster-family-based treatment, congregate residential treatment, therapeutic camping, partial hospitalization, and day schooling. We telephone various sources likely to know

about a youngster's current situation (such as the youngster, parents, parent surrogates, caseworkers, school personnel, probation officers, personnel in other treatment agencies, and our own staff) and find out the current living environment, plus other indicators of success and failure. We then calculate the mean restrictiveness of living for all youngsters discharged from a particular program in a particular year.

Our second use of the scale was in a study that compared outcomes achieved by one of our programs with those of other local placements for youngsters. By inspecting records in the public child welfare agency, we found where each of 410 youngsters had been placed in their years after discharge from each of six different types of settings (11).

In these studies, we have been able to measure the restrictiveness of a youngster's living environment merely by finding out where the youngster is living. Besides being an easy, economical outcome to measure, restrictiveness provides a single, easily understood datum. It has obvious relevance to policymakers and the general public for three reasons: the restrictiveness

of child placements is highly correlated with their monetary cost to the public, legislatures and courts have decreed that treatment must be in the least restrictive environment that can serve the client's needs, and the public recognizes that restrictiveness is inhumane unless there is strong evidence that youngsters will benefit more than they lose. While it is often assumed that treatment is more intensive in more restrictive settings, the public wisely doubts this assumption, and it has not been demonstrated. A treatment's restrictiveness and its intensity are separate dimensions (12).

Some evaluators may argue that the ROLES is unpromising because the direct outcomes desired by treatment programs are changes in the behavior of the youngster and family. We agree that such direct outcomes should be measured (13-15); however, measures of behavior, such as psychological tests and behavior checklists, are usually expensive to obtain, require complex data management and presentation, require extensive explanation and interpretation for the public, and have no clear relationship to public monetary costs. Thus we see interval scales of restrictiveness like the ROLES as valuable additions to the measurement technology available to program personnel and evaluators. Such scales can also be useful in policymaking and program planning, as when considering the establishment of new programs or modifying existing programs.

Finally, we believe the ROLES is useful in considering placement or a change in placement of a youngster. However, it must be recognized that the ROLES does not measure the actual restrictiveness of any specific program. That would require a much more detailed analysis of the program, preferably using empirically developed scales covering procedural and setting characteristics such as those in our definition.

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