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ISSUES IN THE DEVELOPMENT, PROGRAMMING, AND ADMINISTRATION OF COMMUNITY RESIDENTIAL FACILITIES FOR DEVELOPMENTALLY DISABLED PERSONS:

A REVIEW

by

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EXECUTIVE SUMMARY

Powerful forces over the last two decades have caused a fundamental shift in the focus of modes of intervention for developmentally disabled persons. The concepts of "normalization" and "least restrictive environments" have infused the language of the law, regulations, and programs throughout the spectrum of services for developmentally disabled persons, including residentially-based programs. There have also been some words of caution and skepticism about how these concepts, particularly in terms of residential services actually work out in reality. The purpose of this paper was to review the recent research literature to attempt to answer the following fundamental question about delivering services in residential settings—particularly through small facilities—to developmentally disabled persons: "What are the critical variables which predict optimal care in small residential facilities for developmentally disabled persons?" In this instance, "optimal care" was defined in terms of positive developmental and behavioral changes in client performance as a function of experiencing interventions in a small living environment.

The paper was divided into four major sections: an introductory discussion of the forces affecting services to developmentally disabled persons (which will not be repeated here), a

section on demographic background, the factors affecting potential client and organization outcomes, and a summary and conclusion section.

Demographic Background

Available demographic studies have indicated growth in the numbers of community residential facilities across the country. While data was incomplete, a 1977 national survey identified 4,427 community residential facilities in operation of which over 700 were new within the previous twelve month period (Bruininks, Hauber, Kudla, 1979). The trend toward deinstitutionalization was supported by a series of national studies of public residential facilities (primarily the large publicly-supported institutions) reflecting dropping census figures and admission rates (Scheerenberger, 1979). Increasing admission rates to the community facilities, in combination with increasing release rates from institutions, confirmed that deinstitutionalization policies were indeed shifting the focus of services to community residential options. Admission rates to community facilities also showed that 34% of new admissions were clients coming from their natural homes, suggesting that the availability of small facilities may be contributing to utilization by a previously unserved client class.

Most current figures available suggested that in 1977, 62,397 persons were living in community residences while some 151,000 persons were living in public institutions (Bruininks et al., 1979; Scheerenberger, 1979). Data on client characteristics suggested that more able and higher-functioning clients tended to be living in

community settings, while more impaired, lower functioning persons comprised the institutional populations. This suggested that as deinstitutionalization continues, community facilities will be asked to care for more severly impaired individuals than previously, even while providing services to new and presumably higher functioning clients coming from natural or adoptive homes who had never been in the residential services matrix before. There was evidence, in other words, that while the increased availability of small facilities was resulting in a steady pattern of deinstitutionalization, previously unserved individuals were entering the residential system for the first time. Client and Organization Outcome Issues

a. Client Outcome Issues. A review of the literature measuring the impact of the size of a facility on the quality of care delivered suggested that with the degree of resident-orientation of staff and the degree of client satisfaction as predictors, the evidence seems clear that small-sized facilities have more potential to provide a more optimal setting. However, for clients with more complex needs, the evidence suggested that the matching of clients' needs with the types of disabilities providers prefer to work with becomes imperative, since mis-matches most often are given as reasons for failure of clients placed in small facilities.

A number of client adjustment in community settings variables have been researched. These included: interactional behavior of residents and care providers; residents' lifestyles; friendship

patterns; developmental growth, and achievement of adequate self-care skill levels; as well as location and proximity of community services; comfort and appearance of the facility; and philosophy and attitudes of the care providers. The data suggested that various envionmental factors affected client adjustment and determined client outcome to one degree or another; the move to the community potentially had a positive effect on many clients. However, several studies anticipated greater growth than was actually observed and it was increasingly evident that to have significant lasting positive impact on clients, more than simply a normalized environment must be created. For example, the acquisition of self-care skills did not automatically happen in the smaller, "more normalized" environments. The degree of behavioral gains made in community settings and the extent to which they can be maintained over time are among the questions that still must be explored.

On some variables the smaller environments common to community settings actually seemed to lead to maladaptive behaviors in some clients. Rule oriented, overly structured care provider styles did not assure behavioral growth, nor did attitudes prohibiting travel and activities outside the home during leisure time. Smaller living arrangements proved somewhat limiting to developing extensive circles of friends. The social network of friendships did appear to contribute positively to resident adjustment when such networks were allowed to develop.

Aspects of the appropriate role of the care provider emerged. The data suggested that those who actively supported greater independence and responsibility-taking in their clients and were oriented to teaching practical living skills appeared to affect greater client growth than those care providers whose styles were overprotective, domineering, competitive and ideology-oriented. It should be noted that there is a paucity of research which explores the efficacy of small facilities in terms of effecting accelerated developmental rates of change, which in the final analysis, will probably be the most powerful predictor of optimal care in small facilites.

b. Organization Outcome Issues. The literature suggested that staffing-related concerns were of paramount importance to the successful operation of community facilities. Problems of turnover, poor training, or low morale were more immediately felt in smaller residences than in the large institutions where the staff numbers were greater and could "spread out" the effect of such problems. The small residential facility represented an often times stressful work environment where diverse responsibilities and minimal relief staffing combined to create unique conditions. Research studies reviewed underlined the importance of identifying staff needs to which administration can meaningfully respond, the expectations that could be realistically placed on staff training, and the necessity of matching client need to provider preference wherever possible. Attention to the low salary levels and status of direct care providers affected the turnover rates commonly reported. Options such as the

credentialing of paraprofessionals with commensurate pay raises may begin to address this intractable problem.

Another factor of vital importance in effective community facility development which the literature identified lay in the relationship between the community at large and the facility. The basis of most community programming supported—even required—the provision of services (vocational training or workshop activities, public schools, etc.) outside the residence. The development and coordination of these linkages required significant staff work to coordinate existing resources or develop new ones. Such tasks became problematic when the burden of developing an effective relationship with the community at large fell to direct care staff. Three variables (among others) contributing to community placement failures across the nation included the unavailability of behavior management programs, of specialized services (O.T., P.T. or speech therapy) and of appropriate homes.

A discussion of cost considerations raised several major issues. First, it was reported that funding currently comes from a number of sources, though the Federal share is growing. The funding source becomes a powerful ingredient in shaping program design, frequently in disadvantageous ways. Secondly, some cost savings may be realized in community settings, though it was not clear that all costs were identified in such costs studies or that all required services were being provided. Cost data on community settings is very

difficult to compile and does not easily lead to accurate assessments of the true costs of community based care. It is clear that the most cost effective means of care to the State is to maintain individuals in their natural or even foster homes. Conclusion

This review attempted to compile from relevant research a number of variables that may be critical to creating the optimal environment for the developmentally disabled persons in community residences. Where attention is paid to the service impact on the client, or outcome in client growth through measurable terms, then the attempt can be made to create an efficient and effective community network for its clients. Policymaking, whether at the local, State or Federal level, in the courts or on university campuses must incorporate the empirical literature that is already available rather than to act largely on the basis of ideological persuasion. Likewise, extensive research is yet to be done which will contribute further empirical data upon which policy and methodology can be built.

Community-based residences appear to have great potential as the site for humanized and effective service delivery. However, they also have the potential to fail as have many institutions because they could not and cannot deliver effective growth oriented and humane care. Only if policymakers, managers and administrators ensure that these and other as yet unidentified variables become integral components of existing and developing community residences can there be the expectation that developmentally disabled persons will grow and

develop to their greatest ability in an atmosphere that promotes the quality of life to which we all aspire. Without attention to these variables, failure in this already problematic service delivery system may well result in yet another era of institutions.

INTRODUCTION

"It is time to more analytically evaluate the quality of our service systems as they affect the individuals they serve."

(Mesibov, 1976)

There exists a dominant view among many advocates of developmentally disabled persons that if out-of-the-home care is required for developmentally disabled persons, the optimal, most humanizing, and "normalizing" environment for them is the small, community-based residential facility, most like a "normal" home setting as possible. Others believe that the small facility can be one part of a spectrum of residential and non-residential service delivery systems. The purpose of this paper is to explore the recent research literature which adds empirical direction to what has been largely an ideological pursuit. This paper is an attempt to answer the following fundamental question: What are the critical variables which predict optimal care (e.g., that which results in the greatest developmental, behavioral, and affective changes at the least cost) in small facilities? While there are some clues emerging, the reader will soon learn that there remains far more questions than answers.

A brief review of the important forces which are shaping current and future policies and practices in this area are presented, after which some relevant demographic data are summarized. Since the focus of the primary question being asked is on data which appear

relevant to the developmental and behavioral effects on residents as a result of placement in small facilities, a later section deals with client-outcome issues, followed by a section on organization-outcome issues. Finally, a summary and conclusions are provided.

Forces Influencing Current and Future Trends in Services to Developmentally Disabled Persons

Over the last two decades a number of forces related to our Nation's care of its developmentally disabled population have converged, the result of which has had a profound and continuing effect upon the structure and delivery of services to mentally disabled persons. Kugel (1969) summarized the state of institutional services in 1969 by noting:

> Typically, public residential facilities have been plagued by a triple problem: overcrowding, understaffing, and under-financing. To complicate matters further, the public, long accustomed to knowing little about mental retardation, often held inaccurate information, and there was a mystique about the retarded and other handicapping conditions involving feelings of hopelessness, repulsion, and fear. Gradually a change in attitude has been occurring as various significant efforts have been made to enlighten lay and professional people alike. But despite these efforts, the residential facilities of this country have languished. (p. 1)

A growing awareness of the severe problems of institutional life led to a questioning of the basic assumptions underpinning care to institutionalized populations in the past. A coalescing of separate forces in the areas of litigation, legislation, ideology and scientific knowledge have resulted in a number of significant changes in the bases of that care. These influences have been inextricably tied together, both historically and functionally.

The influences of the judicial system as a change agent has been one of the pervasive and powerful forces for change. Litigation

increasingly has been a vehicle for redress and reform of institutional environments and attention to the previously ignored human needs of residents. Beginning with a definition of the "least restrictive environment" in Lake v. Cameron (1966), later explicated in Wyatt v. Stickney (1971) as least restrictive conditions to achieve habilitation or treatment, the courts have continued to be a mechanism for redefining the terms of treatment and the location of its delivery for many handicapped members of society (Coval, 1977). Within the courts, the bases for decisions have changed significantly during the last fifteen years. Early cases concerned issues of freedom from harm and right to treatment within the institutions. More recent court decisions have focused on the treatment environments and appropriateness of community settings as preferable to institutions.

During the same period, advances in Scandanavian thought regarding services for mentally retarded persons took form in the ideology of "normalization." The concept as defined by the Danish Mental Retardation Services refers to "letting the mentally retarded obtain an existence as close to the normal as possible" (Switzsky and Miller, 1978, citing Wolfensberger, 1972, p. 27). As the ideology was explained by Nirje (1969), its primary intent has been to address distorted attitudes about mental retardation which parents, retarded persons themselves, and society at large often hold. The immense task is attempted through an approach that actively supports the integration of normal activities in the lives of retarded persons and their reintegration into the life of the community. The concept of normalization has been best advanced in this country by Wolfensberger (1972).

As a result, advocacy groups and professionals have embraced the principles of normalization to focus attention on alternatives to institutional care (Fram, 1974).

Another potent force which has had a profound and direct effect on services to developmentally disabled persons has come from academicians and researchers who have developed sophisticated technologies for teaching and training developmentally disabled persons. The refinement and implementation of developmentally-based, task analytic training procedures assists mentally retarded persons in the acquisition of increasingly complex and diverse tasks and leads towards greater independence, productivity and human dignity (Gold, 1972; Bellamy, Peterson, Close, 1975; Jacobs, 1976; O'Neill and Bellamy, 1978). Such advances have been geared in the past towards the acquisition of self-care skills and appropriate social behaviors, and now towards vocational ends as well. The combination of all skill areas optimizes the potential for independent living (Close, 1977). Operant conditioning techniques of increasing sophistication, with aplicability to a range of settings, are increasingly moving out of the academic researchers' realm and into residential settings, the work place, the public schools, as well as the home (Bellamy & Pain, 1980).

One of the other major threads in the fabric of social change in the field of developmental disabilities has been in the area of legislative initiatives. Legislation has been in part spurred by litigation and advocacy as well as the civil rights movement and its spin-off to other human rights issues. Responses to the needs of the

developmentally disabled have been greatly affected in recent years (Blatt, 1979). Legislation has resulted in the enactment of the Rehabilitation Act of 1973, especially Section 504, and the Education for All Handicapped Persons Act of 1975 (Public Law 94-142), both pieces of enabling legislation that have dramatically increased the types and extent of services and environments available to disabled persons. The establishment of such agencies as the President's Committee on Mental Retardation and the Administration of Developmental Disabilities has been indicative of forces for change within the public sector. In 1972, legislation was also passed by Congress to include funding for Intermediate Care Facilities for the Mentally Retarded (ICFs/MR) under Title XIX of the Social Security Act (Medicaid). By 1975, 36 States had chosen to participate in the Federal-State entitlement program, and today, 48 States utilize the ICF/MR option in their State plans. Development of the ICF/MR program made available enormous sums of Federal dollars to the States. The States, without particular review, embraced the ICF/MR program to improve the existing institutional system rather than to develop alternative settings. Federal dollars maintained the incentives of institutional care (Nihira, Mayeda, & Wai, 1977) even while the concepts of community placement began to gather strength from the principles of normalization (Nirje, 1969), least restrictive settings (Switzsky and Miller, 1978) and deinstitutionalization (Conroy, 1977).

The legislative basis of the ICF/MR program has not been challenged directly in the courts, but the mid- to late-seventies saw a marked increase in the legal challenges to the appropriateness of

large residential facilities. To date more than two-thirds of the States have become involved in litigative actions over issues of institutional care for mentally disabled persons (Bergdorff, 1980). Developmental disabilities advocates pushed for programmatic remedies in the courts which promote the development of small living alternatives to large institutional training schools (Scheerenberger, 1974; O'Connor and Sitkei, 1975). Meanwhile, program persons in State departments of mental retardation across the country have been developing policy and regulations which are intended to define the concepts of optimal environments for developmentally disabled persons (Gettings, 1980). Ideologically-based principles of normalization have been used extensively to define optimum settings and to determine the maximum size of community facilities. For example, some States currently require or prefer that all new facilities be of a certain small size (e.g., Massachusetts - 12, Maine - 8, Pennsylvania - 3, Georgia - 4, Connecticut - 3). Size of the facility, then, has become one of the dominant determinants of program design.

Two recently published articles on the question of facility size as a factor of quality of care (Baroff, 1980; Landesman-Dwyer, Sackett and Kleinmen, 1980) reflected the continuing interest and concern in professional circles with the issue of optimal size. Baroff stated that the smaller facilities clearly have a greater resident-orientation to care practices and greater likelihood of active treatment. However, the wide variations in quality of care dimensions among same-sized facilities suggest there is no assurance that small size necessarily affects higher quality of care, therefore

concluding that size is not the most critical variable. Landesraan-Dwyer et al., (1980) examined size as a factor in resident-staff interactions in small community residences. They concluded that the behavior of staff members was not closely associated with group home size and further that certain qualities of resident social behaviors appeared inhibited by the smallest residential environments. These articles will be discussed later along with other research studies about critical variables of an optimal community residential facility. The intensity of the discussion about the delivery of services to the developmentally disabled anywhere but in institutions can best be found in Bicklen and Taylor's monograph, The Community Imperative: A Refutation of All Arguments in Support of Institutionalizing Anybody Because of Mental Retardation (1979). The "Imperative" argued that in this time of profound social change, the question of institutionalization versus community integration compels the choosing of sides. Bicklen and Taylor placed on one side of the choice the "pressures and justifications for continued institutionalization of retarded people," and on the other side, the belief that "community integration is morally correct, that integration is basic to the constitutional notion of liberty and that the community programs inherently have far greater potential" (p. 3-4, author's emphasis). Therefore, they stated, the potential for meaningful community programming has never been explored. Further, institutions "have a propensity to spawn abuse while community settings have inherently greater potential to afford humane individualized and appropriate treatment" (p. 6). The "Imperative" ardently supported small residential settings, citing

research suggesting that smaller living units are superior and group homes of ten residents or less tend to be more resident-oriented (Zigler and Balla, 1976; McCormick, Balla and- Zigler, 1975).

The force of the "Imperative's" argument highlights a dilemma experienced by some in the field. Some proponents of the ideologies such as the "Imperative" articulates force an artificial choice between institution and community, in attempts to compel attention to some of the very real horrors of past and present care for institutionalized persons. Proponents of an empirical basis for treatment options, with the questions and concerns they raise about the parameters of optimal environments, are sometimes read by the "other side" as fostering the concept of institutional care. What this paper addresses, in light of growing empirical evidence discussed later, is the view that there are more variables than size constituting an optimal environment for those individuals for whom out-of-the-home care is necessary, and in fact, size may not be the most important variable.

Mayeda and Sutter (1979) noted that the "increased emphasis on the provision of normalizing experiences for disabled persons has sharpened the focus on the potential of environmental influences on the normalizing process." Normalization has frequently been translated to mean community living in family sized units, which some consider to be the most culturally normative setting (Lakin, 1979). To raise the issue of size vis a vis other relevant issues, is certainly not to suggest that large, congregate institutions are themselves optimal environments; rather, it is to explore the

characteristics of various sized facilities that impact significantly upon the provision of care.

What is necessary is a more balanced view of the tradeoffs and consequences experienced in the real world of community service delivery, as an attempt is made to insure that the critical variables of optimal care in an optimal environment are addressed. It would seem to be more productive if ideological and theoretical prescriptions were founded by an empirical base from which service delivery policy issues could then be discussed (Throne, 1979).

A discussion of quality of care considerations in the delivery of human services must inevitably confront the question of quality of care by whose standards. Quality of care as perceived by clients or their families may differ from the notions of efficacy and efficiency of care supported by the public at large. It is certainly conceivable that truly "optimal" client outcomes may come at a price society is unwilling to pay. Traditionally the professionals' perspective that clients' needs required greater resources than available have often been in conflict with society's choices in the allocation of its resources (Ashbough, Bradley, Allard, Reday, 1980). It is important to realize that the definitions of optimal are culturally determined. They reflect a societal willingness or unwillingness to allocate resources in a utilitarian manner to achieve the greatest good for the greatest number or perhaps in the narrower, social control vein the "Community Imperative" describes. To understand the quality of care delivered, its outcomes must be identified and approved within the context of the larger society. And at a more detailed level, outcomes

provide information on the difference a service or intervention makes to the client, and thereby on the effectiveness of the service and its provider. Evaluation of the outcomes allows then, a sound basis for decision making regarding immediate changes in the implementation and on going management of the service (Rowitz, 1979).

The following discussion will explore the extant literature, works in progress and deliberations with knowledgeable individuals in the field of developmental disabilities around the issue of optimal facility size in terms of some of the following questions:

- What environment for what benefits and at what costs can be considered optimal and feasible for developmentally disabled persons?
- Does placement in a less-restrictive environment ipso facto promise the greatest benefit to the client?

  What elements of the environment are crucial to an optimal habilitative setting?

Several assumptions underlie the following analysis. The first is that the ultimate criterion for quality of a residential setting should be developmental growth or outcome of clients (Conroy, 1980), though it is recognized that many "quality" issues pose unique "outcome measure" problems, such as "feelings of well being," etc. Secondly, many variables or dimensions contribute to the outcome and will have varying consequences on client competencies. Finally, these changes in competence can be accurately observed and measured (Bjaanes and Butler, 1974).

Given the assumptions noted above, it appears most logical to explore issues related to outcomes in two dimensions: first, client-oriented outcomes, meaning developmental/behavioral changes in indi-

viduals as a result of encountering therapeutic living and treatment environments; and secondly, organization-oriented outcome issues, meaning the way in which the organization administering care behaves as a function of the forces that impinge upon it. Logically, the two are interrelated and are separated here only for the sake of examining the research in each area as effectively as possible. While these , aspects of care usually complement one another there may well be instances in which what is optimal for the client may not be for the organization and vice versa (Mayeda, 1980). To the extent that conflicts can be predicted in the community settings there may be greater likelihood for developing service systems responsive to both client and organizational requirements. In an attempt then to define the most mutually exclusive and non-duplicative elements of the above questions, the outcomes of the individual (i.e., the client) and the organization (i.e., the administrative unit) suggest the possibility for discussion of the greatest differentiation and unique outcomes.

A section on demographic issues follows immediately to highlight the trends in community residential facilities and to identify some of the characteristics of typical residents in small community facilities. The review of relevant literature is divided into client outcome-oriented issues and organization-outcome oriented issues. A summary concludes the discussion with a catalog of the possible critical dimensions of care in the community environments which require additional study.

DEMOGRAPHIC BACKGROUND

> Evolving social attitudes and changing government policies provided the impetus to reduce the populations of developmentally disabled persons in public residential facilities and to relocate residents in small residential facilities within the community. Between 1960 and 1969, the U.S. experienced a population shift of over 30,000 mentally retarded persons from State operated facilities to community residences.
>
> (Bruininks, Hauber and Kudla, 1979)

Current demographic studies (O'Connor and Sitkei, 1975; Conroy, 1977; Hauber, and Kudla and Bruininks, 1980) indicated continuing rapid growth of community residential facilities for developmentally disabled persons. However, comprehensive and uniform data bases on client development in community facilities do not exist in all areas of the United States, and there have been only inadequate mechanisms for maintaining basic data categories on residents of public residential facilities (Lakin, 1979). There are, though, a number of longitudinal data bases available in localized areas, which have been and can be used to study some of the effects of placements in various residential environments. For example, the UCLA Neuropsy-chiatric Institute Research Group at the Lanterman (formerly Pacific) State Hospital and Developmental Center has maintained a client demographic, diagnosis and evaluation, services and adaptive behavior data base since 1972 under the sponsorship of the DHHS Administration on Developmental Disabilities. Maintained at a level of 20,000 to 23,000 individuals, the IDB has been conducting research on the

effects of services, programs, and environments on changes in adaptive behavior of institutionalized and community based developmentally disabled persons in Hawaii, Nevada, New Jersey, and areas of California, Oregon, and Arizona. Data are also available to the IDB from affiliates in other States and data bases offloaded from the computer at the facility of the UCLA Research Group (Mayeda, 1980). At Temple University, the Developmental Disabilities Center manages a similar, though smaller data base of residents from Pennhurst Training School in Pennsylvania, including those clients moved to the community as well as those still within the institution. Florida's Community Residential Placement Program maintains data on almost 3,000 clients within the State- Colorado has developed a sophisticated client tracking system to monitor clients within its service system. California, through their Regional Center network, maintains files on over 1,000 providers and the clients within those facilities.

National demographic data on developmentally disabled persons within State service systems has been gathered primarily from two sources: Scheerenberger has conducted (for the National Association of Superintendents of Public Residential Facilities) six national studies on public residential services; Buininks and his research team from the Developmental Disabilities Project on Residential Services and Community Adjustment, (and follow-up studies) conducted a comprehensive nation-wide survey in 1977 of community residential facilities.

The results of these surveys reflected the trend toward deinstitutionalization and the concomitant proliferation of community

residential facilities (Scheerenberger, 1977; Scheerenberger, 1979; Bruininks, Hauber, Kudla, 1979). Differences in compiling the registry of facilities mitigated against definitive statements about the number and types of community-based facilities for mentally retarded persons. However, the Bruininks group reported that during the period July 1, 1976 to June 30, 1977, over 700 new facilities were developed with over 16,000 newly admitted residents, and a total of 4,427 community residential facilities were reported in operation at that time.

A comparison of the admission rates between community residential facilities and public residential facilities suggested small but apparent growth trends in community services. Bruininks et al. (1979) reported that of the 27,530 persons admitted to community facilities, only 37% were admitted to public facilities. Of the releases (live releases and deaths) from all types of residential facilities, 59% were from institutions while 41% were from community facilities. These increasing admission rates to community facilities combined with increasing release rates from the institutions confirmed that deinstitutionalization policies may indeed be shifting the focus in residential facilities for developmentally disabled persons.

In the most recent survey of 278 public residential facilities, Scheerenberger (1979) reported that for 222 facilities, new admission rates continued to drop, currently at 4% (5,237 new admissions) of the total resident population (127,975). This compared with previous fiscal years as the lowest reported rate to date (e.g. FY 1976 - 1977, 7.5%; FY 1975 - 1976, 5.4%; FY 1973 - 1974, 7.8%).

Reported readmission rates of 1.9% of a total resident population of 127,385 were also lower than previous years, having been 3.7% for FY 1976-1977 (p. 14). These dropping admission rates combined with policies of deinstitutionalization to lower the annual institutional census.

From the figures reported for 1977, 62,397 persons were living in community residences and over 151,000 persons in public residential facilities (Bruininks et al., 1979; Scheerenberger, 1979). Scheerenberger reported an average population of 585 residents in public facilities. The average size of community facilities served 20 or fewer residents; *72.97,* served 10 or fewer residents. Almost 30,825 people lived in community facilities with thirty or fewer persons.

Another characteristic of note was the previous residential placement figures, providing some insight into client movement through facilities. Bruininks reported that in 1977, 35% of first admissions had come from institutions and 32% had come from natural or adoptive homes. This was confirmed in a later follow-up interview survey of 161 community residential facilities. In the follow-up survey, (Bruininks, 1980) 34% of residents came from natural homes, and residents coming from institutional placements declined to 32%. These figures suggested that there may be utilization by a new client class of the more accessible, community living alternatives which are viewed as more acceptable to families than large institutions. This possibility needs further study to determine whether the easier access and visibility of community living arrangements are in fact drawing new clients into the publicly supported system. Several questions

must be asked. Are these clients already on waiting lists and would these clients have entered the institutional system eventually? What are their skill levels and how might these be supported and enhanced in their natural homes? What are family member perceptions of community living options? These and other questions must be asked before assessing whether a new client class threatens to "come out of the woodwork" and escalate the pressures on community facilities to provide services to growing populations.

Resident movement out of community residential facilities has been variable, both in terms of numbers and type of arrangements to which individuals are released. The Bruininks survey of 1977 noted that 50% of community facilities reported no movement, either in or out during the twelve month study period of the survey. Of the 50% of residents released from community facilities, 24% were released to their natural or adoptive home, 15% to independent living and over 24% to some form of institutional care. The balance was released to foster homes, supervised apartments or other apparently community-based living arrangements (Bruininks, 1979). This preliminary data suggested problems with the commonly held assumption that community residential facilities lead to living arrangements of greater independence. There appears to be less movement than one might have been anticipated.

Data available on characteristics of residents in community facilities suggested that greater numbers of persons are at higher functioning levels than in institutional settings. Sixty-three percent of residents in community residential facilities were

functioning at borderline, mild or moderate degrees of retardation as compared with 24% of public residential facility residents with similar diagnoses; approximately 34% of community residents were severely or profoundly retarded, as compared with 75% of institutional residents (Bruininks, 1980; p. 27). This was confirmed by Eyman and Borthwick (1980) whose study compared resident characteristics in a variety of settings. Their sample of 10,998 individuals produced data suggesting that those who were severely retarded are more likely to be in institutions. Maladaptive behaviors and medical problems are similarly more likely to be evidenced by institutional residents and those in convalescent hospitals, suggesting these are dissimilar groups, as are those in community living arrangements. Therefore, they concluded, it cannot be assumed that community service systems at present can adequately accommodate the diverse and complex needs of those clients still residing in institutions.

In summary, it is evident that community residential facilities are increasing in number and are becoming a stronger force in the continuum of living options for developmentally disabled persons. Policies of deinstitutionalization are evidenced as census rates in large institutions continue to drop. Current figures suggest the size of facilities in the community is predominantly ten beds or less, and they house almost 80% of the identified 62,000 developmentally disabled persons living in "community" settings.

It is clear that persons currently in community-living settings are more able and higher functioning than those residing in institutions. While selection biases may be responsible for such

differences at present, as deinstitutionalization continues, community facilities will be pressed to respond to more needy clients, even as they provide services to new and presumably higher functioning clients coming from natural or adoptive homes. An ominous trend, however, is the growing number of retarded persons being placed in nursing homes. This population must be appropriately accommodated as deinstitution alization continues.

Getting a grasp on national trends in residential services, while essential, does not lend much information about whether or not the lives of retarded persons are affected positively by being served in smaller facilities, defined in terms of the rate and "quantity" of developmental and behavioral changes which may or may not be occuring in the residents of these facilities. The next section contains a discussion of the extant literature in the area of measuring client outcomes of intervention in small settings.

CLIENT-OUTCOME ISSUES

> " ... if clients are merely moved from large institutions with dependency-inducing structures and dynamics to small, community-based institutions with dependency-inducing structures and dynamics, then relocation does not change the essential.characteristics of the client's living condition and creates only the illusion of deinstitutionalization."
>
> Halpern, Binner, Mohr, & Sackett (1978)

Research in Size-Related Factors

Much of the research identifying size as a variable affecting the quality of care has produced conflicting results. However, it does appear that several impressions can be drawn from the literature on size-related factors in small community facilities.

Some small-sample surveys confirmed one facet of community living: reports of client satisfaction suggested the majority of residents would rather not be back in the institution and further, that most residents did find gratifying life experiences in the community (Scheerenberger and Felsenthal, 1977; Anninger and Bolinsky, 1977; McDevitt, Smith, Schmidt, & Rosen 1978; Sitkei, 1980). Such surveys indicated residents experienced a better life style, but one cannot draw assumptions about improvement in functioning levels from these findings. While one would not dispute the importance of indicators of client satisfaction, they cannot suffice as primary determinants of program efficacy. Some evidence in fact indicates

that a moderately structured environment may equal greater client satisfaction (Birenbaum and Re, 1979), supporting the notion that it is legitimate and necessary to identify those aspects of structures equated with developmental outcomes. As noted previously, the ultimate criterion for the quality of a residential setting must lie in the observations of residents' developmental growth (Conroy, 1980). The processes by which such outcomes can be observed are several. Baroff (1980) noted in his review of the facility size-related literature that much of the research conducted to date can be divided into two categorical questions:

1. To what extent does size determine whether care practices are resident-oriented or institution-oriented in staff attention to resident needs?

2. To what extent can size determine the degree of adequacy of resident adjustment in varying sized facilities?

The empirical evidence from methodologically-sound studies consistently reported that the smaller the facility, the greater the likelihood there would be resident-oriented care practices (Klaber, 1969; King, Raynes, Tizard, 1971; McCormick, Balla, Zigler, 1975). This means care is more likely to be designed in response to resident's needs in the smaller facilities, while care practices are often more reflective of institutional convenience in the large settings. However, the same researchers also concluded there were great differences between facilities of the same size as to the orientation of care practices. Baroff (1980) concluded from his review of these findings that size is of questionable importance.

He wrote:

> Both studies (King, Raynes et al.; McCormick, Balla et al.) found that the smallest residential settings, the group homes, were the most resident-oriented but size did not appear to affect this dimension within settings even with wide within-setting variation in the number of residents served. One possible interpretation of this finding is that institutional size, per se, is relatively unimportant, its effect only being noticeable when size differences are large as would be the case in between-rather than within-group comparisons. This would accord Zigler and Balla's contention that other elements than size merit concern, (pp. 113-114)

Certainly there are other intervening variables, as this paper discusses, affecting resident outcomes, yet the conclusion to which Baroff arrived seemed to deny the evidence he himself presented. Size does make an unqualified difference to the extent to which it increases the likelihood of facilitating the performances that are desirable, of identifying needs and constructing effective responses to those needs (Throne, 1980). The degree to which that possibility is achieved may be determined by a number of other variables. Without attention to those other variables the potential for positive growth offered by the smaller-sized environments cannot be realized. What remains extremely difficult is the process of separating out the impact of size from other predictive variables.

There is a final area of apparent consensus in community placement of deinstitutionalized individuals. It seems clear from the literature that two resident-related factors are likely to predict failure in small community placements: maladaptive behaviors and multiple physical health problems (Eyman and Call, 1977; Eyman and Borthwick, 1980; Intagliata and Wilier, 1980). Placement failure predictors, while not related directly to the size of a facility,

underscore a number of service implementation issues regarding the appropriate placement of residents (Eyman and Call, 1977). For example, clients with complex and diverse needs, such as severely and profoundly retarded persons with physical health problems as well will dictate aspects of the service system in which they reside. (Service system issues are discussed in the next section.) Of note here is the impact on clients of poor matches in client needs to residential settings. The Eyman and Call (1977) study suggested a strong relationship between the behavioral growth of residents and the resident-orientation of the care practices. Sutter, Mayeda, Yee & Yanagi (1980) explored the issue of match of client needs to care provider preferences. Measures of behavior preferences of the community care providers were compared with behaviors evidenced by a client failure group (clients readmitted to institutions) and by a client success group (not returned to institutions in proceeding 12 months). The failure group clients presented a range of maladaptive behaviors and health problems as well as a mismatch with care provider preferences. Results of the study suggested a match of provider caretaking preference and client behavior was critical to client outcomes and client-failure indicated the likelihood of a mismatch of preference and behavior. In summary then, on the issues of resident orientation and client satisfaction the evidence seems clear that smaller-sized facilities are more apt to provide the potential for more optimal settings. For clients with complex needs, identification and matching of client needs with provider preferences becomes important given reported reasons for failure of community placement in small facilities.

Client Adjustment in Community Settings

One of the critical studies of the environment of community residential care is the work of Bjaanes and Butler (1974). Characterized as a pioneer effort (Fiorelli and Thurman, 1979), the researchers used resident and caretaker behavioral dimensions to compare differences between board and care facilities and home care facilities. While a variety of differences within, as well as between board and care and home care facilities were observed, the researchers concluded that the greatest difference was observed in behavioral acts of a social interactive nature. The board and care facilities, which tended to be larger (30 persons and 24 persons) showed similarly close interaction scores, with a difference of only four percent. The two home care facilities (four persons and six persons) showed quite different percents of observed interactive behavior of 38.5% and 89.1%. The researchers reported that residents of the board and care facilities evidenced fewer dependent behaviors and were less likely to rely on cues from others for task achievement. In conclusion, the researchers noted "substantial differences in the behavioral component of the environment of community care facilities" (p. 438). They also noted that in the care facility where greatest involvement of the caretaker with resident activities was observed, there appeared to be "greater independence, interaction and less isolation" on the part of residents.

Landesman-Dwyer, Berkson and Romer (1979) studied the friendship patterns of mentally retarded residents in group homes using a behavioral analysis framework similar to that of Bjaanes and

Butler. They described peer relationships as an important component of normalized living and therefore of interest to the process of defining influential environmental variables. They concluded that social interactions occur in dyads, rather than in larger size groups and do not appear to be determined by sex or level of retardation. They noted that, not surprisingly, the group home size "enhanced the extensiveness of residents' affiliation" (p. 578). In large group homes residents appeared to develop wider circles of friends though not of different intensity than those friendships in smaller homes. An earlier study noted that residents in smaller homes spent less time in dyadic interactions and were less likely to have a "best" friend than those in larger homes of 18 to 20 persons. However they did note, in agreement with implications of the Bjaanes and Butler study, that "group home characteristics are better predictors of social behaviors than are individual variables" (p. 578). They did not attempt to relate the impact of peer relationships on other aspects of developmental growth.

A path analysis model of the relationship between community environments and resident behavior changes (Eyman, Demaine and Lei,

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Path analysis is a detailed and complex methodology by which researchers can measure the influence of at least three variables upon one another. Also known as casual modeling or structural equation modeling, the theoretical constructs attempt to estimate how a number of variables relate to each other in combination. In other words, with three variables, A, B, and C, path analysis techniques allows researchers to look at relationships between A and B, A and C, B and C, as well as A and C through B and so forth.

1979) attempted to draw out the observed impact of the environment on actual behavioral development. The sample of 245 developmentally disabled individuals resided in 98 community living settings; developmental data over a five year span was available to the researchers. The path analysis related a number of demographic variables of the clients on the PASS environmental ratings scale and both to changes in adaptive behavior over the five year period. (PASS, developed by Wolfensberger and Glenn in 1975, is an instrument designed to evaluate any service system, using quantitative means to assess its quality and adequacy.) The study concluded that some of the principles of normalization were related positively to developmental growth but that consistently the older, less retarded residents improved in almost any environment. Location and proximity of services, comfort and appearance of the facility and staff availability were positively associated with behavioral growth. A negative relationship was observed between an ideology-related administration and developmental growth of clients. They identified no relationship between the application of the normalization principle and developmental growth. This suggested evidence for Close's (1977) hypothesis in a study on habilitation in community settings that aspects of the service system contribute to developmental growth but that the principles of normalization alone cannot assure it.

A crucial aspect of community adjustment relates to the comprehensive achievement of adequate skill levels. Problems in deinstitutionalization policies have sometime laid in poor and inadequate transition training afforded residents before their transfer out to

community settings (Gollay, 1977). Habilitation may include independent living or gainful employment as long-range goals of skill teaching. Ongoing achievement by residents of self-help skills promotes their own developmental growth and quality of life even as it assists staff.

Nihira and Nihira (1975) reported some gains in positive behaviors in a more normalized environment from a survey of* the adaptive behaviors of 426 community-placed mentally retarded persons. They catalogued those behaviors the care providers identified as normalized behaviors and those behaviors most frequently noted by care providers. The researchers concluded that the residents' abilities to perform self-care skills adequately, help with chores, and interaction with other residents were cited most frequently by staff as normalized behaviors. They noted that while caretaker expectations may differ depending on the client's level of functioning, the small gains of the more severely retarded were as satisfying to caretakers as the larger gains of higher functioning clients.

Results of a study by Fiorelli and Thurman (1979) supported the notion that factors other than simply the normalized environment affected resident behavioral growth. They examined the behavior of four retarded adults before and after moving to a community facility. Extensive measurements of client behaviors were taken, both in the institution and in the community setting. Significant and favorable behavioral changes were observed. The move to the community, at least in the initial period of community residence, seemed to have some impact on behavioral development, as would be expected from the

principles of normalization. However, the authors did note that the significantly different normalization scores of the two living environments (the institution and the community residence) should have resulted in greater changes in client behaviors than were observed. They suggested this may imply the differing environmental features were not so important as to effect lasting changes in client behaviors. They defined a residential ecology that can present barriers or can assist in helping residents maximize their abilities. This works from the behavioral levels residents bri-ng to their environment which is then either enhanced, maintained or diminished by the mix of conditions manifested in the residential ecology.

Eyman (1973), cited in Nihira and Nihira, (1975) compared the acquisition of self-help skills in community and institutional environments. He reported no significant differences between both groups of residents in their ability to acquire toileting and ambulation skills. He did report superior achievement levels in those residents where retraining programs were in place for at least one hundred days. Another study contradicted these results, however. Schroeder and Henes (1978) demonstrated greater gains in skill levels in group homes than in an institutional setting. The researchers suggested this may have been due to greater use of the skills in the group home environment, rather than due to differing learning and teaching environments.

A study of the habilitation of a small group of severely and profoundly retarded adults reported significant gains in skill levels in community settings (Close, 1977). Training addressed self-help

skills, domestic skills and social skills. Baseline skill level data was collected from which the individual programs were developed. Training procedures followed task analytic methods "representing a synthesis of task analytic procedures for program development, sequential training techniques for skill training, and contingency management and over-correction procedures for behavior management (p. 258). The study's results showed substantial, though varying, levels of acquisition of self-care skills and appropriate social behaviors for the fifteen severely and profoundly retarded adults in the study. The authors did caution that the evidenced successes may have been a result of the shift to community living from institutional environments, as suggested by Eyman, Demaine and Lei (1979).

A recent study by Intagliata and Wilier (1980) attempted to identify factors of success in the adjustment of residents to family care homes and group homes. Family care homes had six or fewer residents while group homes had twenty or fewer residents. Initial levels of self-care skills were significantly and positively related to skill level at the one year follow-up. While much of the variance was accounted for by initial skill levels, environmental factors appeared to explain additional variance. In continuing development of self- care skills, residents did better in homes with fewer residents and in family care homes where religious issues and values were emphasized. In the group homes, residents fared better when a practical orientation focused on practical living skills. Residents did less well when care providers were over-protective and domineering and when resident activities were competitively and achievement oriented. Regarding

maladaptive behaviors, residents did better when expressions of anger and hostile feelings were openly encouraged and less well when a rule and routine orientation governed the home.

The researchers looked also at friendship patterns of social support, identified as associated with successful community adjustment (Gollay, 1977). They confirmed the results of Landesman-Dwyer et al. (1979), that the residents in the smaller family care settings have lesser degrees of social support or friendship than do those in the larger family care homes (maximum six persons). On the other hand, in the already larger group homes with fifteen to twenty residents, those homes with fewer residents had the greatest degree of social support. Relationships between the number of residents and optimal social support may be curvilinear within the one to twenty persons range.

The summary of Intagliata and Wilier's results identified residents' level of functioning at the time of placement as a critical factor of later community adjustment. Environmental considerations for adaptive behavior included a value-oriented, emotionally-open family care home in which residents were encouraged to think for themselves. An emphasis on practical living skills, on high resident involvement, and the taking of responsibility appeared to effect adaptive behaviors in group homes. And, for both the family care and group homes, maladaptive behaviors were less in evidence in those homes where residents were encouraged to take responsibility and to openly share their feelings. The opposite was observed in those homes where a controlling, over protective and routinized atmosphere pervaded.

Finally, another dimension of residents' behavioral adjustment to community alternatives must be observed. The longitudinal data on community adjustment is scanty. Although policies of deinstitutionalization have been present for over fifteen years in some parts of the country, little attempt has been made to accumulate systematic empirical documentation of policy effectiveness (Mayeda and Sutter, 1980). In an historical review of the incidence of community placement failure, Sutter, Mayeda, Yee and Yanagi (1980) reported failure rates of 36.1% in the early part of this century, and up to 50% failure rates in the late fifties. Longitudinal attempts to track client progress in community settings are just beginning to be conducted. A recent research study with a longitudinal focus is discussed below.

Birenbaum and Re (1979) studied a cohort of 63 mentally retarded adults who had moved four years previous from institutions to community settings. The researchers presented several disturbing results. They suggested the concept of normalization had promised for many clients the "career-like sequence of moving from dependency to greater self-reliance". That however, was not what they found. Most persons within their study had a life-style of routine and passivity, "a picture of living ... not too different from that of those who are not retarded, but are marginally employed or mostly unemployed" (p. 329). They also reported that staff control (in relation to bedtime hours) seemed to be limiting the natural development of group standards of conformity and informal norms. Finally, the presence of community recreational activities did not assure their usage by residents. Attitudes prohibiting travel and activities outside the home

in the evening were found to be prevalent among residents in the study.

The problems of maintaining achieved success or of retaining new skills were also identified by Karan (1979) in an evaluation study of vocational rehabilitation programs. He concluded that:

> ... data showed gains only occurred during the time clients were actually in attendance at the workshop for upon returning to the institution the behaviors of the project clients returned to the same levels that they were upon entry into the program and indistinguishable form the behavior patterns of a control group, none of whom received any community services (p. 15).

It should be noted as well that the propensity of data reported in this review focuses on self-care, behavioral adjustment, and client satisfaction indices of progress. While these early efforts are essential and certainly important components of any assessment of the efficacy of a mode of treatment, it can be suggested that a more fundamental, and perhaps more important measure of program quality would be assessments of both the extent and rate of growth of cognitive functioning. As is being demonstrated in early intervention research (Meier, 1976), it is increasingly possible to operationalize cognitive functioning in a way which lends itself to measures of rate as well as "quantity" of growth. Single subject methodologies seem particularly helpful in this task (Herson & Barlow, 1976). Measurable and observable changes in emotional growth and development (e.g., judgment skills, age-appropriate interactional skills, stress management, etc.) are likewise important indices of program efficacy. The point here is that underlying all skills is the mediating influence of cognition and the status of the cognitive system serves either as a facilitator of growth or a delimiter of growth. It

remains an empirical question the extent to which cognitive barriers to growth can be ameliorated through excellent programming—regardless of the setting; research methodologies to attempt to measure these effects are essential.

In summary then, the data suggested that factors within the environment do play a role in affecting client adjustment and determining client outcome. It is evident that the move to a community setting results in positive client adjustment and behavioral development for many clients (Nihira and Nihira, 1975). However it becomes increasingly evident that factors greater than simply a normalized environment affect resident behavioral growth (Fiorelli and Thurman, 1979). In fact, several studies anticipated greater growth than was actually observed (Birenbaum and Re, 1979; Eyman, Demaine and Lei, 1980). Acquisition of self-help and other skills is effectively achieved by sophisticated teaching technologies and not necessarily brought about by the smaller or more normalized environments (Close, 1977). Questions are raised as to whether behavioral gains can be maintained over time in normalized settings (Birenbaum and Re, 1979).

Maladaptive behaviors in clients suggest poor matching of care—provider preferences with client behaviors (Mayeda and Sutter, 1980) and may serve as a signpost of a rule oriented, overly structured environment (Intagliata and Wilier, 1980). The friendship networks of clients in community residences were speculated to be a contributor to positive resident adjustment. Too, researchers suggested the smallest living arrangements may prove somewhat limiting in developing extensive circles of friends (Landesman-Dwyer et al., 1980; Intagliata and Wilier, 1980).

Involvement of the care-provider appears to be an important factor in behavioral growth in clients. Data from studies reported here hints at the appropriate role of the care-provider as clues begin to emerge. Care-providers who actively support greater independence and responsibility-taking of their clients, with an orientation to teaching of practical living skills, appear to affect greater client growth than those who managed in a manner that was overprotective and domineering, competitive and ideology oriented (Bjannes and Butler, 1974; Intagliata and Wilier, 1980; Eyman, Demaine and Lei, 1979).

The following section explores outcomes of the organization as they relate to optimal client care and client outcomes. While the clear objective of the administrative unit is, or ought to be, the provision of optimal care to the client, the means and structure of that can vary greatly across communities. The process of the provision of that care, or the organizational environment, is equally as important to address within the context of this discussion as the definitions of the elements of the program environment that have been the focus of the preceeding pages. Staff training and support, administrative ideology, community relationships and cost considerations are the issues of primary concern in the following discussion.

ORGANIZATION OUTCOME ISSUES

> One point of view is to study effects of the organizational structure itself on the delivery of services and the ultimate well-being of the client.
>
> (Sluyter and Mukherjee, 1978)

This section will explore some of the administrative aspects of operating community residences. It goes beyond the scope of this paper to attempt to identify or cover all relevant factors of the operation of a community facility, although an effort has been made to address what appear to be some of the critical factors. Two of the principle areas not addressed here are the revenue sources available to facilities and the degree to which funding channels shape community based systems. The problem of inadequate funds was ranked as the most serious problem of establishing community facilities in 1975 (O'Connor and Sitkei) by sixty-two percent of responding facilities. In Scheerenberger's 1980 survey of community programs and services, funding for adult programming and behavior management programs was judged to be substantially inadequate across the country. Certainly a crucial factor, it is not possible to do more here that identify funding streams as a problem which, through current biases in funding mechanisms, channels disproportionate dollars to the institutional-based care system. A general identification and discussion of Federal funding sources for the community-based facilities and programs can be

found in the final report of an Office of Human Development Services (HEW) grant by Diamond et al. (1980), which further explicated the biases of present funding structures.

Other areas of community residence administration deal with capital investment and start-up costs. Though alluded to in the section on financial issues, it is more fully addressed by Gettings and Mitchell-Jennings (1980). Their principle finding most relevant here was that over 750 million dollars have been invested in the revitalization of institutional-based service systems through the Intermediate Care Facilities for the Mentally Retarded (ICFs/MR) program (Title XIX) in the last three years. This represents an investment of major proportion that will be difficult to abandon despite programmatic and political pressure to do so.

Another area not fully addressed within this discussion are those of property restrictions and zoning problems of local as well as Federal Fire Safety and Building Code Regulations. The American Bar Association's Zoning For Community Homes Serving Developmentally Disabled Persons (1977) discussed these issues in depth.

Three areas are discussed in this section which attempt to address the crucial aspects of each factor. Staff related issues, community integration issues, and operating cost issues are the areas of consideration in the sections that follow.

Staff Related Issues

> (Staffing) the small family group or group home can become an isolating and limiting experience for all its members. Those cared for are stuck with the caretakers and vice-versa.
>
> (Raynes, 1977)

There is not sufficient empirical data on staff-related issues of community residences. A number of surveys have been conducted identifying problem areas that include recruitment difficulties, turnover rates, training and qualifications and staff attitudes towards their jobs (O'Connor and Sitkei, 1975; Berdiansky and Parker, 1978; Roos, 1978; Sluyter and Mukherjee, 1978).

Landesman-Dwyer, Sackett & Kleinman et al. (1980) studied staff and resident interactions in relation to community facility sizes. The twenty group homes ranged in size from six to twenty residents. Observational data on daily behaviors of 240 residents and 75 staff persons were collected with some rather interesting results. The staff behaviors did not appear to differ greatly across the various-sized facilities. Residents engaged in more social behavior in the larger group homes that they did in the smaller ones. The quantity of interactions between staff and residents did not appear to differ between group homes of varying sizes.

The authors noted that staff behaviors of "praising, rewarding, defending, assisting, protecting and sharing" were observed less than four percent of the time in most of the twenty homes in the study (p. 15). They further suggested that the homogeneity of staff behaviors in publicly-supported group homes indicated poor staff tailoring to the individual needs of residents. They proposed that given certain realities of the working conditions (e.g. low pay, minimal status and long working hours) it might be more advantageous, even practical, to manipulate other influential variables in the environment than staff "since there may be little possibility of

maintaining desirable changes in staff members' behavior over long periods of time" (p. 16). Staff in-service opportunities are usually perceived as the primary way to affect staff behaviors.

A study on staff training (Schinke and Wong, 1977) suggested that training can affect the knowledge base of staff regarding behavioral technologies, as well as their attitudes towards residents. The study was a pre-test, post-test design, with an eight week training program for the experimental group and the control group receiving training following the post-test if they desired. Results showed significantly greater gains in the knowledge base for the trained group. Significant positive improvement on staff attitude factors were observed for the trained group. Staff attitude factors studied included "relaxed," "withdrawn," "hostile," and "aggressive." The researchers suggested that changes in attitude may have been due to the staff's greater knowledge about residents, leading then to some behavior change effects. With effective implementation of behavioral techniques, staff attitudes were in turn affected.

In a cross cultural study of resident care practices, McCormick, Balla, and Zigler (1975) concluded that staff trained in aspects of developmental child care created a more resident-oriented environment. This would seem to be confirmed by Schinke and Wong's observations of more positive staff attitudes towards residents following the training. Job satisfaction decreased for both the trained and the control groups, though a smaller decrease was observed in the trained group. Observations of staff and resident interactions showed greater incidence on the part of trained staff of positive

response to positive resident behavior and neutral or negative response to negative resident behavior. The researchers in commenting on Balla's (1976) conclusion that there is little evidence suggesting size is a factor affecting resident behavior, argued that greater difference might be observed if "the development of effective staff training programs paralleled current deinstitutionalization trends" (p. 135).

Intagliata and Wilier (1980) in their study on success factors in community residential facilities, identified staff characteristics most likely to affect positive resident behaviors. Those staff who were younger and better educated, and not overprotective or overcontrolling seemed to be important to the furtherance of client developmental growth.

Juxtaposed against these studies is a study on care provider preferences regarding resident placement (Sutter, Mayeda, Yee and Yanagi, 1980). Identification of care provider preferences of client behavior led to some interesting conclusions about the success or failure of client placements. In those cases where problem behaviors of clients were not among those which care providers preferred to deal with, there was a greater likelihood of placement failure. Effective matching of care provider preferences with client behaviors may be one way to address the dilemma of the short-term investment training can represent, given the high turnover rates in this work force.

There are aspects of the staffs' role in a small community residence that makes it a more difficult and not necessarily more rewarding job than related positions in institutions. A survey of the

working conditions of direct service staff in Pennsylvania identified some of those differences (Dellinger and Shope, 1978). The small group home can represent a stressful work environment. Diverse responsibilities, not many staff members among whom to share those responsibilities, frequency of "on call," and minimal relief staffing all are factors that combine to create conditions "unique to the community living alternative and different from the eight-hour shift of the institutional attendant" (p. 20). Intensity of interrelationships among the small staff of group homes increased the likelihood of interpersonal conflicts which, in small groups, can be devastating. Staffers of small community residences do not have the anonymity afforded those working in large institutional environments (Felsenthal and Scheerenberger, 1980). While that increased visibility can represent increased accountability to one's peers, without effective management or supervision to monitor and support staffers, the stresses of the environment seem more likely to bring out the rigid, overcontrolling attitudes identified as being disadvantageous to client growth (Intagliata and Wilier, 1980). A survey of Massachusetts community residence staff (Humm-Delgado, 1979) presented evidence of the conflicting roles in which staff may find themselves:

> ... although staff wanted to assist clients to lessen their dependence upon others, increase decision making abilities and become integrated with the community, they still saw themselves as filling additional conflictive roles: providing emotional support and acting as parental figures (p. 250).

Staff training in the concepts of behavior modification and developmental training would assist staff in identifying the line between supportive teaching styles and dependency-inducing caretaking. The need for sophisticated and sensitive staff capabilities is increased with the prospect of a changing client mix with greater numbers of the more severely and profoundly retarded persons moving to community settings as deinstitutionalization reaches deeper into the institutions. Eyraan and Call (1977) suggested that the intractable behavior problems of self-violence, violence to others and damaging property "represent the types of behaviors that will surely persist as obstacles to community placement for large numbers of retarded individuals" and further that this "suggests the need for intensified individual attention and programming for retarded persons with behavior problems if community placement is to be successful for large numbers of these individuals" (p. 143). Already Mayeda and Sutter (1980) noted in their report, Deinstitutionalization Phase II, an analysis of deinstitutionalization rates in Hawaii, that the "decreased number of placements available to lower functioning clients and the increased probability of placement failure requires more realistic projections ... be made of the rate at which institutional populations can be reduced" (p. 9). They went on to note that the usual recommendations of in-service training to improve placement success has been an ongoing element of Hawaii policy without apparently successfully affecting the slowed deinstitutionalization rate in that State. Training then cannot be the panacea to respond to the complexity of issues related to the community programming for the

developmentally disabled, no matter how important it remains as a factor in creating the optimal care environment.

The dilemma presented to policy makers is that with the existing salary levels and status associated with these jobs, turnover rates are not likely to decrease significantly. To the contrary, the realities of the work environment assure ongoing difficulties in the recruitment, training and retraining of staff. Staffing problems will undoubtedly persist until a commitment can be made to compensate individuals commensurate with the diversity of responsibilities they are required to perform. Particularly in the field of mental health, paraprofessional and non-paraprofessional credentialling has been viewed as one aspect of the total process of generating and maintaining motivated, competent and productive staff (McPheeters, 1980). Community Integration

One of the essential elements of the normalization principle is the possibility it presents for integration into the community of persons previously isolated from it. It has been proposed that through integration with the normal and usual activities of the community at large, developmentally disabled persons achieve a more meaningful lifestyle, and thereby are more likely to achieve their maximum potential (Wolfensberger, 1969). The value for developraen-tally disabled persons of access to existing services, activities and opportunities of the community is in some ways the kingpin of normalization and of current judicial decrees (Kenowitz and Edgar, 1977).

A number of problems have become apparent in relation to the assumed presence of community opportunities, their identification by community residence staffers, and their use by developmentally disabled persons in community residential settings. The problem areas include:

a. fragmentation or lack of organization in local service delivery syteras;

b. inappropriate institutional placement or retention due to lack of community-based services or facilities; and

c. absence of formal linkages among community programs.

There are a number of questions that must be asked about the community network into which deinstitutionalized persons are to be integrated (Diamond et al., 1980). The first is, do the necessary services and opportunities exist? Secondly, can an effective linkage be made between the service and the client? Who is to oversee the development and maintenance of that linkage? And finally, assuming services are identified, how is their use by clients supported?

No research study on generic community services was identified by this writer, although a number of surveys have been conducted on the above questions. Several authors of studies discussed earlier in this paper have commented on issues of community services. These are summarized below. Because data is apparently not available, this discussion will focus more on some of the appropriate questions that must be asked.

Mayeda and Sutter (1980) noted that:

> while some deinstitutionalization efforts have involved the creation of a comprehensive network of services in the community, to accommodate deinstitutionalized clients, it is more commonly the case that once placed in the community, clients must rely on services provided by the existing community service network (p. 3).

Systems such as the Intra-Community Action Networks (Kenowitz and Edgar, 1977), are among those systems designed to mobilize existing community resources to assist the handicapped and their families. However, as Jaslow and Spagna (1977) noted, there is high likelihood of gaps in available services.

As discussed earlier, Eyman and Borthwick (1980) noted in their sample of 10,998 individuals receiving services that those more severely mentally retarded with attendant physical handicaps were most likely to be found in institutional settings. Therefore, they concluded there were differences in service needs among the institutional and community living groups such that existing community resources "appear to be insufficient to accommodate all institutionalized residents" (p. 65).

A comparative cost study (Nihira, Mayeda and Wai, 1977) discussed later in this section highlighted problems in the coordination of existing generic services for community-living clients. They found a low rate of utilization of community professional services. They noted:

> the underutilization of professional services in the community suggests the serious difference found between the categorically allocated funds for institutional DD/MR residents and similarly handicapped clients in the community (p. 6).

They suggested that the weakness of the coordinating interface in community service patterns combined with differences in reimbursement criteria and policies for community-living persons resulted in low utilization rates of generic services.

With reference to the issue of service need as it related to service provision, a study of Florida group home residents identified significant discrepancies between those services needed and those provided (Jaslow and Spagna, 1977). They found almost one-half of the 477 subjects in the study were receiving services not identified as needed in the individualized habilitation plans, while 16% of services identified in the plans were not being provided (p. 229). They noted that those services most likely to be unavailable were those relating to the developmental model. This concurred with Scheerenberger's (1980) survey of community programs and services needs as perceived by 278 superintendents of public residential facilities. Across the ten regions surveyed, availability of behavior management programs are, he reported, "relatively unavailable any place in the country" and the quality of those available was rated as a major, constant problem across the country (p. 10). Specialized services such as physical therapy, occupational therapy, or speech were rated as difficult to obtain for mild and moderately retarded persons. The ranking of problems causing community placement failures in relation to community services is reproduced (as adapted) in Table I.

Eyman, Demaine and Lei (1979) stated that environmental characteristics of the service system such as the environmental blending of facility with neighbor, location and proximity of services seemed

TABLE I

PROBLEMS CAUSING COMMUNITY PLACEMENT FAILURES:

COMMUNITY VARIABLES

Characteristics	Mild	Moderate	SMR/PMR	Total
	Rank	Rank	Rank	Rank
Transportation	6	5	6	6
Medical services	9	9	8	9
Appropriate homes	3	3	2	3
Educational programs	8	8	7	7
Sheltered employment	5	4	4	4
Recreation/social programs	4	6	5	5
Specialized services (e.g., PT, OT, Speech and Counseling)	2	2	3	2
a. Behavior management programs	1	1	1	1
Advocacy or protective services	7	7	9	8

(Adapted from: Scheerenberger, 1980, p. 3)

to contribute significantly to growth in clients. However, the extent of that impact has not yet been explored. And further, the presence of services does not appear to guarantee their utilization. Birenbaura and Re (1979) in their four year follow-up study of 63 mentally retarded adults, noted that "community location and easy access to mass transportation cannot, by themselves, produce greater participation in the community beyond the world of work" (p. 329).

This comment was made in reference to observations of clients who seldom ventured out into the community except for work related routines.

Another factor often raised in relation to community services is that of leisure time activity. The advisability and enjoyment of leisure activities is certainly not disputable. What is sometimes a question is the role leisure activities appropriately play in the active treatment framework that a developmental outcome focus demands. Corcoran and French (1977) articulated the dilemma as one in which some communities, in an effort to be responsive to the recreational needs of retarded adults, placed them in special, segregating and potentially isolating programs. Other communities enroll handicapped persons into programs designed for children with "normal" needs, thereby failing to meet the specific age-appropriate needs of the retarded adult. To find community organizations willing to accept these programming responsibilities is difficult. Structure of leisure time and the teaching of leisure time planning is an area important to address in community programming and one sometimes overlooked in considering habilitation plans.

One of the important opportunities the normalizing environment of the community may provide is the opportunity for work, whether in sheltered programs or in gainful competitive employment. While it is not within the scope of this paper to discuss specific issues of the administration of work opportunities for persons with varying levels of mental retardation, it is important to recognize the concept of work as one vital to the viability and efficacy of the community

concept of care, and therefore, important to community residences as well. The current styles of the institutionally-based care system have been characterized as a welfare approach to services where an ongoing dependence on long term care only fosters continuing dependency in its minor emphasis on job preparation and independent living skills (Bellamy, Sheehan, Horner and Boles, 1980).

One of the primary impediments to the development of vocational opportunities in community-living settings for mentally retarded persons is the capacity of staff members to identify and capitalize on work opportunities. Vocational rehabilitation agencies have traditionally placed an emphasis on helping clients other than those represented by retarded persons in general and the severely retarded in particular. While this may be changing due to national shifts in the priorities of such agencies, it remains true that the direct care staff of the residences are the front line staff most likely to be of assistance in locating meaningful work activity for residents. And further, while jobs for clients can be located (Stewart, 1977), it is hard to find work, regardless of ability or training, so the role of staffers in job seeking becomes even more problematic when balanced against their other responsibilities.

Technologies exist to provide most retarded persons with sufficient skills to work in competitive employment (Bellamy et al., 1980). Adequate knowledge regarding employer attitudes exists (Farber, Kaplan, Mayeda and Sutter, 1980; Stewart, 1977) to support appropriate and successful client vocational placements. What must still be addressed is the means by which employment is identified and

persons helped to the point where they can get a job and keep it.

The interactional effects of the organization's needs and the requirement of clients can at times be great. The outcomes of the client and those of the organization are sometimes different and the means by which they are achieved can often be at cross purposes. A factor analysis of PASS III (Demaine, Silverstein and Mayeda, 1979), the latest version of the service systems evaluation tool (Wolfensberger and Glenn,"1975), suggested that administration-outcome items load differently from the client-outcome items. This seems consistent with the considerations discussed above in which staff time can be pulled between administrative activities, such as community relations, bookkeeping, house maintenance and those activities more directly client-related such as behavioral-oriented teaching programs. In those instances where staff must perforce choose their priorities, the outcomes of the lower priority item will undoubtedly suffer.

In summary then, a relationship between the residents of community facilities and the community at large must evolve. It does not just happen. When the burden of that relationship falls primarily to the direct care staffer to coordinate services, deal'with the community, organize leisure time activities, and identify structured or competitive employment opportunities, the tasks may be achieved with varying degrees of efficiency. Cost Consideration

> "An implicit assumption of deinstitutionalization is that community-based residential alternatives are not only more normalized but are less expensive to operate."
>
> (Intagliata, Wilier and Colley, 1979)

A recent Health Care Financing Administration internal memo asked whether costs for the ICF/MR program had reached $1.5 billion for fiscal year 1980 (Muse, 1980). The answer reported was that probably expenditures were greater than that, perhaps as much as $2.1 billion in 1980 and anticipated to continue to increase at the substantial rates observed for the previous six years. It is difficult to know how much is currently being spent on community care since revenues come from a number of sources (e.g., Federal, State and local) with data gathering systems only minimally in place. Nihira, Mayeda & Wai (1977) observed that reimbursement processes obscured the flow of dollars to community facilities, making it difficult to obtain aggregated fiscal information. It was equally difficult to assess the impact of existing service deficiencies and service duplications on costs.

Several comparative full—cost studies have been completed in the last three years, however. A 1974 cost study (Nihira, Mayeda, & Wai, 1977), compared several hospital and community care costs at several sites in California, Washington and Florida. The investigators concluded that:

> when adjusted to include educational programs, special professional services and services provided by generic agencies or third party payors, the true costs of services in community settings approaches the costs of care in State hospitals (p. 4-5).

Further, they noted that when clients did receive a full array of those services called for in habilitation plans, the costs did not differ significantly from the full costs of care in large institutions. It was when generic services were underutilized that apparent cost

savings were effected. True cost savings, they surmised, are achieved when clients are retained at home; even with back-up support services to the home environment, costs savings would still be realized over entry into publicly supported residential facilities or institutions. A later cost report (Nihira, Mayeda & Eyman, 1979) attempted to match costs of care in three settings and to disaggregate costs based upon client placement, level of functioning, sex and age. The investigators found:

a. cost differences of institutionalized and community living placements could not be proved because certain overhead costs were unavailable;

b. utilization of services was shown to differ between institutionalized clients and community placed clients, suggesting access, availability and eligibility issues in the community;

c. costs were greater for clients aged 0 to 17 than for those over 18 in both institutional and community settings;

d. costs of care for females were more than males; and

e. greater costs for lower functioning clients could not be uniformally proved in all settings, (pp. 4-5).

A number of methodological problems affect cost studies of community programs, including difficulties in identifying costs, overhead allocation bases, and unavailable cost on charges incurred elsewhere (ABA Commission on the Mentally Disabled, 1978). Where costs are too narrowly defined, true costs are distorted, thereby invalidating comparisons between community and institutional setting.

Intagliata, Wilier and Cooley (1979), in a cost study of a variety of living settings, identified costs of care as including

room, board, attendant care and personal items. They concluded that costs in the community were less than those incurred in institutions as follows:

Comparitive Costs for Residential Services

Setting	Cost (Resident/Year)
Institution	$14,630
Group Home	$9,255 - $11,000*
Family Care	$ 3,130
Natural Family	$ 2,108

*variation depends upon residents level of disability (p. 154)

These results differed from the findings of the Individualized Data Base Research Group cost studies (Nihira et al., 1977; Nihira et al., 1979). Unfortunately, line item budgets with no attention to functional costs centers and no consistent standard units of service defined jeopardized the adequacy of the cost data.

Data on cost as it related to the size of facilities is generally not yet available. Size of a facility does have impact on the dollars necessary to run the establishment. For example, in Colorado, group homes are no smaller than eight persons because at current charge rates from the State rate setting commission, revenues generated by eight clients are sufficient to maintain a fiscally sound operation. Fewer than eight residents for a prolonged period of time draws revenues below the break-even point (Delturco, 1980). This raises issues of occupancy rates, waiting lists and jeoparadized fiscal solvency that must be considered in the adminsitration of community residences. In some facilities, economies of scale can be achieved by squeezing more clients in, not an uncommon occurrence in

those States where licensing of small group homes has not yet happened. This suggests that it can be the cost-related issues that sometimes determines the care practices by shaping the care environment. Attention must be paid to the impact of financial policies upon the care system as well as vice versa.

The administrative structures of the facility delivering care have a role to play in the quality of care provided and on its costs. The particular framework, e.g., regionalized or central control, proprietary or non-profit, single units or clusters cannot be debated here because of the complexity of issues involved, but it is an important factor to note. Certainly no one structure can be appropriate or advisable for the many different communities across the country. The implications of any given service framework do have to be analyzed and considered in terms of creating optimal community-based living environments. An effective program will be one which adequately assesses the larger environment to identify that organizational entity that most tightly fits with the constraints and possibilities represented by the surrounding community.

In summary then, three points must be made. First, funding for community residential facilities currently comes from a number of sources although the Federal share is continuing to grow. The funding source is a powerful ingredient in shaping program design, not necessarily in advantageous ways of either efficiency or effectiveness. Secondly, while some savings may be realized in the community settings it is not clear that all costs have been identified or conversely, that all services required are being provided. Hence, reports of

lowered costs may not accurately reflect what is happening or needs to be happening in community service delivery. Cost data on community settings is currently very difficult to compile due to the means by which community facilities function financially with a variety of revenue sources and non-standard accounting procedures, and varying allocation bases for overhead costs. Finally, there are circumstances when cost-related issues determine the program, e.g., staff patterns, numbers of residents in a facility, opportunities or lack thereof for capital improvements and administrative structure. Given the influence of fiscal matters in shaping program parameters, it is incumbent upon policy makers to identify the various incentives and disincentives of their reimbursement structures so that implementation of programs may proceed in a rational manner with attention to client-care concerns, not a reactive stance attempting to cope with apparently contradictory funding networks.

SUMMARY AND CONCLUSIONS

While this review has attempted to study as much of the environment of community residential alternatives as possible, certainly there are concerns that have not received sufficent attention. Among these issues are the special considerations of service delivery in rural areas, fiscal management and client tracking systems, analyses of existing government regulations and of recent court decrees. On any of the topics that were addressed in the paper, much more undoubtedly could be said to expand the dynamics and considerations of any given area.

Within the limitations noted, the following appear to be the main points (though not in any priority order) to which this review has been led:

1. Studies of the efficacy of small residential facilities which are based in measurable, developmental outcome measures appear to be most productive in an effort to identify the critical variables which may predict optimal care.
2. The trend (in litigation and policy) to focus on size issues, particularly in terms of arbitrary ceilings on the sizes of community-based facilities does not appear to be supported by the literature. It seems

clear that size is a factor, but probably not the most important factor. If fact, it appears that in some settings, facilities that are too small actually result in poorer care.

3. Staff training, compensation, and utilization must be included in any list of critical variables which may predict optimal care environments, and these areas seem highly vulnerable to neglect in small facilities.
4. Funding streams, availability and utilization of generic services, and the availability and use of work opportunities in the community are also impor tant variables which affect client outcomes.
5. Client-outcome measures which include "quantity" and rates of changes in cognitive functioning and measures of emotional growth and development are important sources of information about the "efficiency" of the treatment environment to effect real change. Studies in this area seem not yet to be available.
6. It seems clear that policy-making, regulations, legislation, and court decrees are not reflective of much of the empirical literature already available but rather are more responsive to ideological persuasions which may or may not be optimal in the real world of service delivery.

There seems to be little question that there is general (albeit not total) agreement that service delivery systems to serve the developmental needs of developmentally disabled persons should focus on the community as the most appropriate environment within which to deliver services. As everyone must surely know, the "community"—and however it is defined in any given real place,—may or may not be "normalizing," "humane," "accepting," "generous," "capable (e.g., able to pay)," and the addition of this client class is the addition of just one more group that the community has to struggle to accommodate. This is not to say that one should not try; it is to say that community-based services have just as much potential, and perhaps even more potential in some instances, to thwart the realization of the humane and worthy objectives of those who espouse the normalization principles than do larger, congregate settings. When one qonsiders the problems of our society—at the point of where people actually live—one cannot help but be impressed by the tremendous effort which must be expended to ensure that the apparent critical variables discussed in this paper are present in a service delivery system, but more importantly, that they are maintained and nurtured in such a way that the developmentally disabled recipient of those services experiences the growth and development which we accept and recognize as his right as an equal citizen under the law. What is asked, then, is not simply that we try, but that we base our policies, our legislation, and our funding on as solid empirical ground as possible, for failure to develop excellent accountable, productive community-based services will most surely result in another era of institutions.

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