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CHARACTERISTICS OF INDIVIDUALS IDENTIFIED AS BOTH EMOTIONALLY DISTURBED AND MENTALLY RETARDED

The Ohio State University

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CHARACTERISTICS OF INDIVIDUALS IDENTIFIED AS BOTH EMOTIONALLY
DISTURBED AND MENTALLY RETARDED

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By
Susan Marie Arnoczky, B.S., M.A.

* * * * *

The Ohio State University
1981

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This dissertation is dedicated to the memory of my friend and graduate adviser, Vance W. Cotter. I will always be grateful for the time I had as his advisee. He taught me much and I miss him.
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I would first like to thank Dr. John Cooper for taking over as my graduate adviser under difficult circumstances. He has been more than understanding and generous.

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Special thanks go to R. W. Thompson for his support and assistance these past two years. He listened and understood when no one else did; provided encouragement when no one else seemed to care; and believed in me when even I lost faith. His unsselfish generosity will never be forgotten.

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CHAPTER I

RATIONALE

Introduction

"Is he mad because he is retarded, or is he retarded because he is mad? (Menolascino, 1971, p. 97)"

This question epitomizes the long and colorful history of the relationship between mental retardation and emotional disturbance. Over the years the two have been viewed as inseparable entities, as distinct and separate entities, and as coexistent entities (Menolascino, 1965). Primitive notions of psychopathology did not differentiate between mental retardation and emotional disturbance, no doubt because of the observable similarities. The two were equated until psychopathology became more refined, and the two were classified separately into gross categories. This separation continued until the late eighteenth and early nineteenth century. During this time advances in the fields of anatomy and physiology, as well as advances in humanitarianism brought improved treatment for the institutionalized. This increase of interest in institutionalized individuals resulted in the discovery of psychotic behavior patterns in the mentally retarded (Beier, 1964). This began the study of the coexistence of emotional disturbance and
mental retardation, and to this day, the same basic questions are being asked: 1) What is the prevalence of emotional disturbance among the mentally retarded? and 2) Are there certain types of personality disorders which are characteristic of the mentally retarded?

The current literature relevant to these questions is scarce, and what is available tends to be speculative in nature. Authors such as Phillips (1968, 1971), Robinson and Robinson (1965), and Garfield (1963), indicate that there is some evidence that the incidence of emotional disturbance is higher among mentally retarded than in individuals of average and superior intellect. Menolascino (1971, 1977), concurs with these studies, stating that the mentally retarded individual is probably a higher "risk" for developing concomitant emotional disturbances. Chess, Korn and Fernandez (1971), and Gruenwald (1974), found evidence that the multihandicapped child is more vulnerable to emotional disorders than the mentally retarded population at large. Despite this evidence that emotional disturbance is higher among mentally retarded and multihandicapped individuals, there is little definite evidence to demonstrate whether they can, as a group, be characterized by any special personality patterns or disorders.

Menolascino (1977) notes that there has been an increase of interest in the behavioral dimensions of mental retardation, the differentiation between the symptoms of mental retardation and emotional disturbances, and more recently, the challenge presented by the presence of both in a given individual. He attributes this increased interest in part, to the intervention of citizen groups such as the National Association for Retarded Citizens, who are concerned about the quality
of care and treatment for emotionally disturbed mentally retarded individuals.

In 1976, Ohio's Association for Retarded Citizens intervened on behalf of the emotionally disturbed mentally retarded individuals under the care of the Ohio Department of Mental Health and Mental Retardation. The Association alleged that the Department was depriving appropriate services to clients residing in state institutions who were labeled as exhibiting emotional disturbances and functioning at some level of mental retardation. This allegation stemmed from situations where the individuals were being continually transferred back and forth between mental health facilities and mental retardation facilities. The mental health staff claimed that the individual was too low functioning to profit from programming at the mental health center, and the mental retardation staff claimed that the individual was too violent, aggressive, or withdrawn to profit from programming at the mental retardation center. The individual was lost in the shuffle or all too often, discharged to the community with no access to any type of programming. Sooner, or later, these individuals usually came to the attention of the courts and were placed back into the system.

In an attempt to remedy this situation, a class action suit was filed on behalf of these individuals under the Federal Civil Rights Act, the Rehabilitation Act of 1973, and the Developmentally Disabled Assistance Act (Note 1). As part of the final consent order of the law suit, the Ohio Department of Mental Health and Mental Retardation agreed to conduct comprehensive evaluations of the class members to determine
individual needs and to establish special units to provide appropriate services for this special population.

During the efforts to comply with this consent order, it soon became apparent that different treatment programs would be needed to meet the special needs of these individuals. Many of the class members were more aggressive than the other residents in the mental retardation facilities and of a much lower intellectual functioning level than the residents in the mental health facilities. As efforts began to train the mental health and mental retardation staff to deal effectively with these emotionally disturbed mentally retarded individuals, it became apparent that resources and information regarding the characteristic, diagnosis and treatment of these individuals was scarce and insufficient.

Menolascino (1977) notes that an attempt has begun to analyze the various characteristics of these emotionally disturbed and mentally retarded individuals, but he sees a continuing need to provide more evidence to promote a widespread appreciation of coexisting symptoms and disorders in order to avoid reducing complex disorders to simple diagnostic and treatment formulations. Studies of the types of emotional disturbances noted in the different levels of mental retardation, as well as the extent of multihandicapping conditions associated with the presence of emotional disturbances are long overdue. Only after these areas are studied can meaningful services be provided to these individuals.
Purpose

The purpose of this study therefore is to analyze the available data collected by the Ohio Department of Mental Retardation and Developmental Disabilities to meet the requirements of the O.A.R.C.v. Moritz consent order. This analysis is conducted in an effort to identify the characteristics of these emotionally disturbed and mentally retarded individuals in the hope that it contributes to the existing body of knowledge and leads to a better understanding of these individuals.

Research Questions

1. What is the relationship between sex and age of institutionalization?
2. What is the relationship between age of institutionalization and level of mental retardation?
3. What is the relationship between the age of institutionalization and psychiatric diagnosis?
4. What is the relationship between multihandicapping conditions and level of mental retardation?
5. What is the relationship between multihandicapping conditions and psychiatric diagnosis?
6. What is the relationship between level of mental retardation and psychiatric diagnosis?
Emotional disturbances among the mentally retarded are of interest for the same reasons that such disorders are of interest when they occur in the general population. Studies of emotional disturbances are important in order to understand them as a natural phenomena; in order to determine causes or controlling principles; to shed light on normal behavior as it occurs in extreme or exaggerated states; and to find means to halt or reverse the process (Beier, 1964). In addition to these general reasons for the study of psychopathology in any population, its occurrence in the mentally retarded raises special problems in matters of incidence, differential diagnosis, and treatment. The literature relevant to the coexistence of mental retardation and emotional disturbance is scarce. What is available on this topic tends to speculative and the research often suffers from too few subjects and too many generalizations. If mental retardation and emotional disturbances are studied separately however, interesting similarities can be found in the areas of sex, age, and complicating disabilities. In the following discussion, the available literature for these three areas is examined in terms of their relevance to both mental retardation and emotional disturbance. First however, the discussion centers around the coexistence of mental retardation and emotional disturbance, the
The Coexistence of Mental Retardation and Emotional Disturbance

The association between mental retardation and emotional disturbance has been of increasing interest, and their coexistence in the same individual raises two basic questions: 1) What is the prevalence of emotional disturbance among the mentally retarded? and 2) Are there certain types of personality disorders which are characteristic of the mentally retarded or levels of mental retardation? In the course of the following discussion, the available literature as it relates to these two questions is examined.

In an early study by Herskovitz and Plesset (1941), 18 cases of mentally retarded individuals with emotional disturbances were identified from a population referred for admission to a small private hospital. Behavioral disorders exhibited by these individuals included psychotic episodes, rage reactions, hyperactivity with aggressiveness and psychosis due to the effects of the degenerative process occurring during the normal senium. They reported schizophrenia occurring in persons with I.W.'s less than 80 but none below 50, but concluded that any psychosis which occurs in a person of normal intelligence can occur in the mentally retarded.

Penrose (1945) in a clinical and genetic study of 1,280 cases of mental retardation reported 204 with some form of emotional disturbance, 48 of these accounted for by schizophrenia. He concluded that mental illness is one of the single most important factors in the selection of
mentally retarded individuals for institutionalization. This was in part because of the aggressive and socially inappropriate behavior of most of his subjects.

Saenger (1967) in his study of factors influencing the institutionalization of mentally retarded individuals in New York City came to the same conclusion as Penrose. He stated that with the exception of the degree of mental retardation, behavior problems that took place outside the home was the single most important factor in determining institutionalization. Shellhaus and Nihira (1969) reviewed 711 social histories of individuals from a rehabilitation center and found anti-social behavior outside the home to be a primary factor to these individuals being referred to an institution. In all these studies, this trend was particularly noticeable among the mildly mentally retarded.

Tredgold (1947) in a review of institutionalized mentally retarded in England, found a higher prevalence of emotional disturbance than in the general population. He also reported schizophrenia to be the most prevalent of the psychosis. From these results he concluded that the mentally retarded was more prone to emotional disturbances than the general population. Pollock (1945) speculated that the general rate of incidence of mental illness is higher among subnormal persons than the general population. He analyzed 444 admissions of "mentally subnormal" persons to an institution and reported that 18 percent were schizophrenic and 39 percent had transient psychotic episodes of excitement.

Weaver (1946) analyzed a sample of 8000 mentally retarded in military service, and found 44 percent of the males and 38 percent of the females had to be discharged on psychiatric grounds. Dewan (1948)
in a similar study, found that 47 percent of the mentally retarded recruits in the Canadian Army were emotionally disturbed, as compared to 20 percent in the nonretarded group. Reber (1964) cites the studies by Weaver and Dewan as the most informative of the true incidence of emotional disturbances among the mentally retarded because the subjects were not institutionalized and as a result, probably more representative of the population at large.

Craft (1959) surveyed 324 inpatients in the age range of 16 to 60 years of age, and found 33 percent to be emotionally disturbed. He also noted that the schizophrenias were a common diagnosis, although no figures were given. Menolascino (1965, 1966) notes in his studies of institutionalized mentally retarded that 30–40 percent were emotionally disturbed. Others such as Garfield (1963), Robinson and Robinson (1965), Phillip (1977) and Szymanski (1980), in their respective reviews of the literature concluded that there is a higher incidence of emotional disturbance among the mentally retarded. Garfield (1963) and Phillips (1977), also concluded that schizophrenia was the most frequently occurring psychosis and that it most often occurred in the mildly mentally retarded.

It would appear from these general studies and observations that in the mentally retarded populations examined, there is a higher incidence of emotional disturbance than would be found in the general population. There also appears to be general agreement that of the major psychoses, schizophrenia is the most prevalent, especially at the mild level of mental retardation. These findings must be placed into perspective however. Altrocchi (1980) and Sarason and Sarason (1980) in
statistical reports on the incidence of emotional disturbances, report that schizophrenia accounts for 25-50 percent of all the hospital beds in the United States. With schizophrenia occurring at such a high rate in the general population, it is not surprising to find it at an increased rate among the mentally retarded. The fact that the mildly mentally retarded were mentioned so often is not surprising. Robinson and Robinson (1965) report that the mildly mentally retarded accounts for 85 percent of all the mentally retarded. These two facts combined with the observation that most of the populations in the studies cited were institutionalized, should make one cautious about making many generalizations.

Only two true epidemiological studies for the prevalence of emotional disturbance among the mentally retarded could be found. Lemkau, Tietz, and Cooper (1942) surveyed the Eastern Health District of Baltimore in 1936 and estimated that over 40 percent of the mentally retarded in this survey had a psychiatric problem. Unfortunately there was a great deal of variability in the definition of mental retardation due to the unavailability of the subjects' I.Q. scores. Rutter, Tizard and Whitmore (1970) in 1964-65 surveyed the entire population of 9-11 year olds of the Isle of Wright. Of the mentally retarded children identified on the island and in this age group, one-fifth had a psychiatric disability. This prevalence rate of 20 percent is considered higher than for the general population of the Isle of Wright (5.4 percent).

These epidemiological studies support the general contention that among mentally retarded individuals there is a higher incidence of emotional disturbance than for the general population. It can also be said
that these studies are more representative of the population at large and therefore have more generally.

**Differential Diagnosis**

There are some obvious problems in determining the presence of an emotional disturbance in a mentally retarded individual, or in assessing the general intellectual functioning and adaptive behavior in an emotionally disturbed individual. The definition of mental retardation underscores the presence of subaverage intellectual functioning and associated deficiency in adaptive behavior (Grossman, 1973). However, the majority of emotional disturbances listed as capable of producing the symptom of mental retardation are more descriptive of symptoms rather than specific diagnostic entities (Menolascino, 1977). What remains is symptomatic behavior which can be produced by a variety of causes. Does the individual have a suppressed intellectual functioning ability and poor adaptive behavior because of his/her overriding psychosis, or is his psychosis actually the manifestation of behavioral characteristics peculiar to his level of mental retardation? Robinson and Robinson (1965) warn that severe personality disorders, almost by definition prevent adequate development of verbal skills, abstract reasoning, and adaptive behavior of the kinds that are basic to the abilities called intelligence. Beier (1964) states that many cases labelled "mentally retarded" are primarily profoundly emotionally disturbed and the intellectual deficiencies are essentially the result of such disturbance. Almost every emotional disturbance results in a reduction of the efficiency and effectiveness of the individual and this can be interpreted as mental retardation. Phillips (1977) adds that
the psychotic child will often present a picture of intellectual, social, emotional, and developmental retardation.

On the other hand, the mentally retarded individual, because of his/her developmental lag is consequently apt to exhibit behaviors that are inappropriate for his/her chronological age, thereby appearing emotionally disturbed (Beier, 1964). How does one interpret the behavior of a mentally retarded 15 year old with a mental age of five? Szymanski (1980) reports that in a sample of 52 retarded children, 58 percent were considered overactive by their caretakers and teachers. In most cases however, the behaviors exhibited by the children were not at all abnormally excessive if one considered the child's mental age.

In reviewing the diagnostic criteria for Disorders of Infancy, Childhood, and Adolescence (American Psychiatry Association, 1980), a prevalence of behaviors such as inattention, hyperactivity, impulsiveness and unresponsiveness are listed. The literature shows that severely and profoundly mentally retarded individuals tend to exhibit a high prevalence of maladaptive, disruptive, self-injurious and stereotypic behaviors. Berkson and Davenport (1962) and Kaufman and Levitt (1965) found that over two-thirds of randomly selected residents from various institutional settings displayed self-stimulating behaviors. Forehand and Baumeister (1976) estimated that the occurrence of self-injurious behavior among the retarded ranges from 7-20 percent. Inattention and impulsiveness is reported to be high among the severely and profoundly retarded also (Cleland, 1979). These behaviors exhibited by the severely and profoundly mentally retarded need not be indicative of underlying psychosis. Several studies, in attempting to isolate factors producing
these behaviors, suggest that these behavioral patterns are related to both conditions of the organism and to the nature of the external environment. Berkson and Davenport (1962) in a study of institutionalized severely retarded and multihandicapped individuals found that there was a significant inverse relationship between level of mental retardation and stereotyping behaviors. They also reported a higher rate of self-stimulating behavior for blind and nonambulatory residents. In a follow-up study (Berkson and Mason, 1963) self-stimulating behavior and self-injurious behavior were found to increase in the presence of other people. Hollis (1973) in a study of institutionalized severely and profoundly retarded found that the rate of self-stimulating behavior could be controlled through both contingent and noncontingent reinforcement. This provides substantial evidence that such seemingly aimless and repetitive motor activities are actually learned adaptive behaviors for the environment and not necessarily indicative of emotional disturbance. Possessing these "learned adaptive behaviors", it seems likely that the severely and profoundly mentally retarded would find themselves with a disproportionate number of diagnoses within Disorders of Infancy, Childhood, and Adolescence.

Another problem that complicates differential diagnosis is the variety of speech and language patterns exhibited by mentally retarded individuals that deviate from patterns expected at certain chronological ages. Delays in speech development and articulation disorders are frequent among the mentally retarded (Szymanski, 1980). Henderson (1969) estimated that 43 percent of the mildly and moderately mentally retarded, 74 percent of the severely retarded, and 100 percent of the
profoundly retarded has some form of speech or language problem. Meyen (1978) states that without exception, severely and profoundly mentally retarded will show some type of speech and language deficiency, including some bizarre speech patterns found in the severely emotionally disturbed. Echolalia and egocentric speech can represent the developmentally normal speech of younger children and can actually serve as practice with newly acquired language skills or even companionship to a lonely retarded individual (Szymanski, 1980), Webster (1970), points out that the language and thought process of the mentally retarded may often reflect simplicity of emotional life, difficulties in conceptualization, and a lack of social experience. When one considers the diagnostic criteria for Schizophrenia, speech and language play an important role. An individual receiving a diagnosis of schizophrenia should exhibit delusions, hallucinations, a loosening of association, illogical thinking, and a poverty of speech content (American Psychiatry Association, 1980). All of these symptoms require that the individual be able to communicate with the psychiatrist at a fairly high level of sophistication. Taking this into account, one might predict that individuals who are mildly or moderately mentally retarded would tend to be placed into the category of Schizophrenia in disproportionate numbers. While the speech and language of the mildly and moderately mentally retarded tends to be more sophisticated that that of the severely and profoundly mentally retarded, there might still be a "poverty of content", or a reflection of "illogical thinking" as a result of their lack of social experience and difficulties in conceptualization. Speech and language, or the lack of it, is also part of the diagnostic criteria for another
emotional disorder. Pervasive Developmental Disorder which falls under the broad category of Disorders of Infancy, Childhood and Adolescence, can be characterized by a "gross" deficit in language (American Psychiatry Association, 1980). This would tend to support the notion that disorders in this category are biased for the severely and profoundly mentally retarded population.

In summary, the psychiatrist's job of discriminating between mental retardation and emotional disturbance, as well as discerning the presence of mental retardation in an emotionally disturbed individual, or the presence of an emotional disturbance in a mentally retarded individual, is difficult at best. He must be able to differentiate between aspects of symptomatology related to multihandicaps that may be associated with mental retardation; cognitive deficiencies; stimulation, education, and expectations that the individual has experienced; and environmental conditions (Szymanski, 1980). The added evidence that the diagnostic criteria for some of the psychiatric diagnoses are biased for certain levels of mental retardation only complicates the matter. It is little wonder why some authors claim the impossibility of separating emotional disturbance from mental retardation in an individual. Very few answers are available, but some significant questions have been raised concerning differential diagnosis. Menolascino (1970) warns that too much emphasis on determining if an individual is either emotionally disturbed or mentally retarded leads to treatment distortions and inaccurate pronoses. Beier (1964) summarizes the issue best by stating:
The interdependence of emotion and intelligence is a fundamental fact of human behavior, at the psychological and biological levels of integration. We should no longer wonder at the evidence of dysfunction in either in the presence of disorder in the other, but rather ask: By what mechanism has it occurred in the particular case and by what means may it be remedied? (p. 473)

Our emphasis with these individuals, whether they be mentally retarded, emotionally disturbed, or both, should be on improving their weaknesses by utilizing their strengths. Diagnostic labels and classifications can then be forgotten and the individual can be viewed and treated as a whole person.

Weaknesses in the Available Literature

Garfield (1963) warns against accepting the generality of the results of most of the literature in this area. Most of the available studies have been conducted with institutionalized populations and this represents only a portion of those individuals who are mentally retarded and emotionally disturbed. Only four of the available studies had a representative sample of mentally retarded (Weaver, 1946; Dewan, 1948; Lemkau, Tietze and Cooper, 1942; and Rutter, Tizard and Whitmore, 1970). The institutionalized samples would tend to have more individuals with aberrant or socially inappropriate behaviors than are present in the general population (Szymanski, 1980). As indicated earlier, socially inappropriate behavior is the second leading cause of institutionalization (Shellhaus and Nihira, 1969; and Saenger, 1967). It is possible that these studies are systematically ignoring the passive and withdrawn individuals who tend not to be institutionalized with the same frequency as the aggressive individual.
The studies prior to 1973 often used differing definitions of mental retardation with no regard to adaptive behavior, and the studies prior to the publication of the Third Edition of the Diagnostic and Statistics Manual (American Psychiatry Association, 1980), used various psychiatric classifications. Because of the scarcity of data and the problems just cited, any attempts of synthesis or conclusions concerning emotional disturbance in the mentally retarded is difficult and precarious, and perhaps premature.

**Psychopharmacological Treatment**

Medical misuse has long been associated with psychotropic medication for the mentally retarded individual (Rivinus, 1980). When an additional diagnosis of emotional disturbance is involved, the potential for drug misuse is even greater because the area is new and treatment strategies are few. Rivinus (1980) warns that psychotropic drugs should be used to treat specific diagnoses, syndromes, or symptoms for which the drug has been proven effective, and should never be used in lieu of environmental improvements or individual programming. Lipman (1971) reviewed drug usage in 173 institutions for the mentally retarded and found that 51 percent of this population were administered psychotropic drugs. Chlorpromazine (Thorazine) and thioridazine (Mellaril) accounted for 58 percent of these drugs. Sprague (1975) reviewed over a thousand mentally retarded persons in a midwestern institution and found 64 percent receiving psychotropic medication. Polypharmacy, or the use of two or more drugs in combination, occurred in 75 percent of these cases. A study by Rivinus (1980) found psychotropic drugs used in 59 percent of the cases and polypharmacy in 27 percent of the cases.
In a review of the available psychotropic drugs and their effects, Rivinus (1980) states that there are no indications for the use of one drug instead of another in mentally retarded individuals. He does note however, that chlorpromazine, thioridazine, and haloperidol (Haldol) are the drugs that have been most widely tested in emotionally disturbed mentally retarded subjects. The effects of these drugs and the reasons for their prescription will not be discussed as it is beyond the expertise of this author, and the scope of this study.

Sex

In reviewing the literature for mental retardation and emotional disturbance, it is interesting to note the similarities of the findings. For both disabilities, sex of the individual determines some interesting observations. Almost all studies dealing with abnormalities in children report a higher incidence in males than in females (Robinson and Robinson, 1965). In a survey of 9000 children born in Baltimore by Pasamanick and Knobloch (1969), it was found that there was a much higher prevalence of cerebral palsy, epilepsy, mental retardation, emotional disturbance, and reading disability among the males. Richardson and Higgins (1969) in a survey of Alamace County, North Carolina, reported males to have a higher prevalence of all handicapping conditions except orthopedically handicapped and heart condition. The other handicaps were epilepsy, visual impairment, auditory impairment, emotional disturbance, cleft palate, speech disorder, mental retardation, cerebral palsy, and skin condition. Of the total conditions reported, sixty-one percent were in males even though males were only 51 percent of the total population surveyed.
Beiser (1972) and others (Rosenthal, 1970; Gruenberg, 1966; and Sarason and Sarason, 1980) report a higher incidence of emotional disturbance for males than for females. Rosenthal (1970) in a study of admissions to a mental health facility reported four males to every one female at first hospital admission. Beiser (1972) reported that males are referred twice as often as females in a survey of community health centers. Watt and Szulecka (1979) in their study of the effects of sex and age at first admission to a hospital found that males outnumbered females three to one.

Many factors are involved here, from hereditary factors which make it more likely for males to manifest recessive characteristics carried on the sex chromosome, to social or cultural demands which require males to be more independent and place more stress on them (Robinson and Robinson, 1965). Richardson and Higgins (1969) speculate that parents seek help more frequently for boys than for girls as a result of differential expectations for males in our society, and that this biases surveys to conclude a higher prevalence of handicaps for males. Beiser (1972) speculates that boys' disruptive behavior may be more disturbing to parents, and it is easy to see that antisocial or aggressive behavior in a male can be viewed as potentially harmful by the community in general. All these factors would lead to more males than females being viewed as deviant, being referred for treatment, and being institutionalized.
Age

The factor of age produces some interesting relationships of its own in the areas of mental retardation and emotional disturbance. Not only to males outnumber females for all types of disorders and handicapping conditions, they also tend to be diagnosed at an earlier age. Watt and Szulecka (1979) report that the male schizophrenics in their study were identified ten years earlier than the female schizophrenics. Surveying first admissions to a mental health hospital, they also found that this identification usually occurred in early adolescence. Rosenthal (1970) and Sarason and Sarason (1980) in their respective reviews of the available literature report that males with emotional disturbances are identified from six to ten years sooner than females with similar emotional disturbances and that this identification typically occurred during adolescence. Once identified and hospitalized, males and females showed no difference in make-up of age of length of institutionalization (Rosenthal, 1970; and Sarason and Sarason, 1980). So although emotionally disturbed males tend to call attention to themselves at an earlier age, there is no evidence to indicate that their emotional disturbances are of a different or severer nature than those of females.

Beiser (1972) found that for the mildly and moderately mentally retarded, identification usually occurred between the ages of ten and fourteen. This finding tends to support other research such as Saenger (1967) and Shellhaus and Mihira (1969) who found adolescence to be a highly correlated factor in institutionalization of the mildly mentally retarded. Gruenberg (1966) in a review of developmental
histories of institutionalized mentally retarded, discovered that for individuals with severe mental retardation, the rate of identification was highest in the five to nine age group. He concluded that school entrance forced the identification of these individuals. Identification of the profoundly mentally retarded occurs at an even earlier age than for the other levels of mental retardation. For the most part, age of identification of the mentally retarded is inversely proportional to the severity of the mental retardation (Cleland, 1979). This is due in part to the "visible" nature of profound mental retardation. Cleland and Clark (1966) and O'Grady and Talkington (1976), in individual surveys of the profoundly retarded, both found the profoundly retarded individual to manifest more skeletal and physical abnormalities. These "enormous and easily detectable defects", as Cleland and Clark (1966) refer to them, allow for the early identification of the profoundly mentally retarded individual. Knobloch and Lilienfeld (1965) in their comprehensive study of birth defects support the findings of the others. They too found a high percentage of infants with the grossest birth defects to be profoundly mentally retarded. Even for the profoundly mentally retarded individuals who manifest no physical abnormalities, their developmental lag becomes apparent at an earlier age than the other levels of retardation, resulting in an earlier identification (Cleland, 1979).

Szymanski (1980) in his study of the developmental stages in the life of the retarded individual and his/her family, lists several crisis points. One is school entrance and the other is puberty. School entrance, as mentioned earlier, accounts for the identification of the moderately mentally retarded and some of the severely mentally retarded
Individuals. The profoundly mentally retarded individuals have usually been identified before the age of five and school entrance. The mildly mentally retarded, with their higher levels of adaptive behavior, managed to slip by unnoticed for a few extra years. Puberty brings with it special problems for the mentally retarded, especially the mildly mentally retarded. It is easier for parents of mildly retarded children to forget their mental handicap and maintain unrealistic expectations for the child. Parents must deal with some very sensitive issues during adolescence and are often unable to walk the tight line between their child's need for independence and his lack of maturity (Bootzin and Acocella, 1980). Heber (1964) summarizes the plight of the adolescent mentally retarded individual by stating:

> In view of the intellective limitations in the capacity of the retarded person to gratify basic needs in a socially approved manner within a highly competitive culture, it would be rather remarkable if the mentally retarded did not show a heightened susceptibility to personal and social maladjustment (p. 146).

The age appropriate and socially expected developmental challenges of adolescence may be insurmountable for the mentally retarded or emotionally disturbed youth. The manifestation of socially inappropriate behaviors as well as the increase in physical size and strength during the adolescent years may be anxiety provoking for family and community. This combined with the attainment of sexual maturity and the perceived vulnerability of mentally retarded and emotionally disturbed, especially females, may account for the increased identification and institutionalization among adolescents.
Multihandicapping Conditions

Meyen (1980) suggests that those who are poor or otherwise handicapped and are discriminated against for various reasons are especially at risk for the development of behavior patterns eventually classified as deviant. If this suggestion is true, then what are the chances of the multihandicapped exhibiting deviant behavior patterns? There is evidence in the literature to suggest a higher prevalence of multihandicapping conditions among both the mentally retarded and the emotionally disturbed.

Wolf and Anderson (1969) estimate that anywhere from 25 percent to 50 percent of all mentally retarded children are multiply handicapped. They report

... the greater the medical significance of the primary condition, the greater the likelihood of some other condition being present (p. 1828).

Among the mentally retarded it is estimated that 17.8 percent have a seizure disorder, 26.8 percent are visually impaired, 14.9 percent are auditorily impaired, and 40.2 percent motorically impaired (Meyen, 1980). Wishik (1969) in a study of prevalence, disability, needs and resources in the state of Georgia, found that handicapped individuals had an average of 2.2 disabilities each, 17 percent had three, and 10 percent had four. He also found a high degree of emotional disturbance among individuals with cleft palates and speech impediments. In the epidemiological study by Rutter, Tizard and Whitmore (1970), 90 percent of the mentally retarded and 36 percent of the emotionally disturbed in the sample had a multihandicap. Morgan (1971) in her study of socially rejected children, found that these multiply handicapped
Individuals as a group, manifested more maladaptive behaviors than a comparable nonretarded group. In a study of a residential center for the blind, 28.5 percent of the population was found to be emotionally disturbed, and 13.2 percent were both emotionally disturbed and mentally retarded (Crucickshank, 1969).

The question of relationship between multihandicapping conditions and mental retardation or emotional disturbance is complex. If being mentally retarded increases one's chances of also being multiply handicapped, and if being multiply handicapped increases one's chances of being emotionally disturbed, perhaps this helps to account for the increased incidence of emotional disturbance among the mentally retarded. Obviously this can only account for a portion of the reported increase since only 25-50 percent of the mentally retarded are also multiply handicapped, but it can provide some insight into a possible factor.

Several authors have addressed themselves to stress and vulnerability to explain the relationship between multiple handicaps and mental retardation and emotional disturbance. Sarason and Sarason (1980) define stress as one's reaction to situations that pose demands, contrasts or opportunities. Vulnerability is defined as how likely one is to respond maladaptively to a certain situation. The two are interactive, the greater the vulnerability, the less stress is needed to cause a maladaptive response, and vice versa. A multiply handicapped individual is seen as having high vulnerability, therefore a situation of relatively low stress could cause a maladaptive response. The "diathesis-stress model" of Rosenthal (1970) is based on a predisposing bodily cause of stress reaction. Rosenthal state that this predisposing
bodily cause could be a physical condition such as a multiple handicap, giving the individual fewer effective ways of dealing with stress in an adaptive way, and resulting in socially inappropriate behavior.

The literature, while raising several interesting hypotheses, is still inconclusive. However, in relation to the stress-vulnerability theories of Rosenthal (1970) and Sarason and Sarason (1980), it is easy to understand how the presence of a multihandicapping condition could lead to maladaptive behaviors or emotional disturbance, or at least a suppressed level of intellectual and adaptive functioning. As to whether the emotionally disturbed mentally retarded as a group exhibits a higher prevalence of multihandicapping condition, further studies need to be conducted.

Summary and Conclusions

From the review of the literature available on the coexistence of emotional disturbance and mental retardation, and the separate literature relevant to age, sex, and multihandicapping conditions as they relate to both mental retardation and emotional disturbance, the following conclusions can be made:

1) There is a higher incidence of emotional disturbance among the institutionalized mentally retarded than would be found in the general population. The specific reasons for this higher incidence have yet to be established, however, it has been suggested that the mentally retarded individual, because of his/her deficiencies and developmental lag tends to
exhibit behaviors that are interpreted as being indicative of psychosis.

2) Emotional disturbance, after the degree of mental retardation, is the single most cause of institutionalization of the mentally retarded.

3) Of the major psychoses, schizophrenia is the one most associated with the mentally retarded, especially the mildly retarded. No specific reasons have been found for this, although it is suggested that a potential bias for mildly and moderately mentally retarded in the diagnostic criteria for schizophrenia, and the higher prevalence among the general population could account for the increased incidence in the mentally retarded.

4) Because of the nature of the research and the way in which the samples were attained, caution must be used in generalizing the results of the available literature.

5) Psychopharmacological treatment of emotional disturbances in the mentally retarded occurs in one out of every two cases. The drugs of choice are chlorpromazine (Thorazine) and thioridazine (Mellaril), and polypharmacy is a frequent occurrence.

6) There is a higher incidence of all forms of handicaps, including mental retardation and emotional disturbance among males. The specific reason for
this has not been established, but it has been suggested that differential social demands and parental expectations for males leads to the differential rate of identification.

7) The age at which mentally retarded individuals are identified is inversely proportional to the severity of their mental retardation.

8) There is a higher incidence of identification of both emotional disturbance and mild mental retardation among adolescents. It has been suggested that this is due to age and cultural expectations of the individual at this time of life and the anxiety reactions of family and community.

9) There is some evidence to indicate that multiple handicaps occur at an increased rate in both mentally retarded individuals and emotionally disturbed individuals, and that having one handicap increases one's chances of having another.

10) The interaction of stress and vulnerability leads to suppressed intellectual and adaptive functioning that could label an individual as mentally retarded, emotionally disturbed, or both.
CHAPTER III

PROCEDURE

This study was conducted with the permission of Ohio Legal Rights Service, attorneys for the plaintiffs in O.A.R.C. v. Moritz, and the Ohio Department of Mental Retardation (see Appendix).

Subjects

The subjects for this study were 242 class members of the O.A.R.C. v. Moritz suit who fell under the care of the Ohio Department of Mental Retardation. These individuals were thought to be both mentally retarded and emotionally disturbed. Their level of mental retardation ranged from mild to profound, and their emotional disturbances included seven separate psychiatric diagnoses. All resided in one of five state developmental centers for the mentally retarded. Their ages ranged from 16 to 78 years. There were 108 females and 134 males.

Materials

Materials used were the comprehensive evaluations of each subject as required by the O.A.R.C. v. Moritz consent order. These data were compiled by the professional staff at the developmental centers where the subjects resided. Subjects, sex, date of birth, and admission to the institution were compiled by the social work staff. The medical
staff recorded all dosages of prescribed medication. Assessments of the levels of mental retardation (American Association on Mental Deficiency definition) were based on a standardized test of general intellectual functioning (Stanford-Binet, Cattell, or Wechsler) and adaptive behavior (Behavioral Characteristics Progression or Adaptive Behavior Scale). The psychiatric staff employed direct observations and interviews with the subjects to form a psychiatric diagnosis. Finally, additional handicapping conditions were listed in the medical report.

**Definition of Terms**

The definitions of the factors that were examined in this study are as follows:

**Psychiatric Diagnosis** (also Emotional Disturbance) - a diagnosis as contained in the *Diagnostic and Statistical Manual of Mental Disorders III*, American Psychiatric Association, 1980. Only major category headings were used. All subcategory diagnoses were collapsed into major categories.

**Mental Retardation** - a significant subaverage general intellectual functioning existing concurrently with deficiencies in adaptive behavior, manifested during the developmental period. Levels of mental retardation may be categorized as Mild, Moderate, Severe, or Profound as described by Grossman (1973).
Multihandicapping Condition - any additional handicapping above and beyond the mental retardation and emotional disturbance. The multihandicapping conditioned displayed by the subjects in this study were seizures, visual impairment, auditory impairment, diabetes, cerebral palsy, scoliosis, and paralysis.

Psychotropic Medication - drugs or other active substances used in the treatment of behavioral disorders and to influence affective, behavioral, and emotional states, as described in the Physician's Desk Reference (1980).

Procedures

Data Collection

Each comprehensive evaluation was reviewed by the investigator of this study. Data was obtained from these files by extracting information related to age, length of institutionalization, psychotropic drugs, level of retardation, psychiatric diagnosis, and multihandicapping conditions.

The subject's date of birth was used to calculate his/her age, and the date of admission to the institution was used to determine the length of institutionalization. A Physician's Desk Reference was used to determine which medications were considered to be psychotropic in nature, and only these drugs were extracted as part of the data. The level of mental retardation and the psychiatric diagnosis was copied from the subject's summary sheet. Validity of these diagnoses was demonstrated by the consensus of the team of professionals who
performed the comprehensive evaluations. Only those evaluations that had team consensus of the two diagnoses, as evidenced by the team meeting minutes, the three one-hour observations of the subject, and the interview with a direct care worker familiar with the subject, were utilized for purposes of extracting the data. Out of a possible subject pool of 385, only 242 were found to be usable by this criterion. Finally, the medical report was reviewed for multihandicapping conditions.

Confidentiality

No personally identifiable information was used in this study to insure the confidentiality of the subjects.

Data Analysis

The data were analyzed separately by characteristics using a frequency analysis. A t test was performed to determine if the differences between the mean ages of the males and females were significant (Ferguson, 1959). A chi-square analysis was conducted for interacting characteristics (Mendenhall and Ott, 1972).
CHAPTER IV

RESULTS

The results of the data analysis are reported in subsections covering each of the five major descriptive variables examined in this study of their combination. These sections are: 1) Age and Sex; 2) Level of Mental Retardation; 3) Psychiatric Diagnosis; 4) Multi-handicapping Conditions; and 5) Level of Mental Retardation and Psychiatric Diagnosis.

Interobserver Agreement

Once the data were recorded, 25 files were randomly chosen using a random numbers table. An independent rater reviewed the same information and recorded her results. These results were compared to the original data collected by the first researcher to determine the degree of interobserver agreement on the extracted data. This was calculated by using the formula:

\[
\text{Agreements} \div \text{Agreements + Disagreements} \times 100
\]

Sex and Age

The data in Table 1 show the means by sex of the subjects' age, the age at which they were institutionalized, and the length of their
TABLE 1

Means Analysis of Age, Age Institutionalized and Length of Institutionalization by Sex

<table>
<thead>
<tr>
<th>Variable</th>
<th>Range</th>
<th>Males N = 134</th>
<th>Females N = 108</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>16-78</td>
<td>35.47 14.07</td>
<td>38.95 13.85</td>
</tr>
<tr>
<td>Age Institutionalized</td>
<td>6-51</td>
<td>16.09 9.21</td>
<td>19.50 11.82</td>
</tr>
<tr>
<td>Length of Institutionalization</td>
<td>1-56</td>
<td>19.38 11.55</td>
<td>19.62 11.77</td>
</tr>
</tbody>
</table>

Total N = 242
institutionalization. Males were institutionalized at 16 years of age, an average of three years earlier than the females. Both males and females however, had been institutionalized for the same average length of time ($\bar{X} = 19$ years). An adjusted value of $t$ was determined to test for the significance between population means for males and females (Cochran and Cox, 1960). There was no statistically significant difference between the mean ages of the males and females ($t = 2.20; p < .05$), the mean age at institutionalization ($t = 2.47; p < .05$), or the mean length of institutionalization ($t = 1.97; p < .05$).

**Level of Mental Retardation**

Table 2 shows the distribution of the subjects across the four levels of mental retardation. Sixty percent of the subjects ($N = 146$) were in either the moderate or the profound range of mental retardation, with the fewest subjects (16.9%, $N = 41$) in the mild range of mental retardation.

Table 3 reports the mean ages of both males and females by level of mental retardation. For all levels of retardation, males were institutionalized at an earlier age than the females. The difference ranged from two years at the profound level of mental retardation, to six years at the severe level of mental retardation. The age of institutionalization for both sexes was inversely proportional to the level of severity of mental retardation. For all levels of mental retardation, no statistically significant difference was found between the male and female population variances.
### TABLE 2

**Distribution of Subjects Across Four Levels of Mental Retardation**

<table>
<thead>
<tr>
<th>Level of Mental Retardation</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild</td>
<td>41</td>
<td>16.94</td>
</tr>
<tr>
<td>Moderate</td>
<td>73</td>
<td>30.16</td>
</tr>
<tr>
<td>Severe</td>
<td>55</td>
<td>22.72</td>
</tr>
<tr>
<td>Profound</td>
<td>73</td>
<td>30.16</td>
</tr>
</tbody>
</table>
**TABLE 3**

Age at Institutionalization of Males and Females by Level of Mental Retardation

<table>
<thead>
<tr>
<th>Level of Mental Retardation</th>
<th>Males</th>
<th></th>
<th></th>
<th></th>
<th>Females</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>(\bar{X})</td>
<td>SD</td>
<td></td>
<td>N</td>
<td>(\bar{X})</td>
<td>SD</td>
<td>(t)</td>
</tr>
<tr>
<td>Mild</td>
<td>24</td>
<td>18.1</td>
<td>9.77</td>
<td></td>
<td>17</td>
<td>22.9</td>
<td>8.79</td>
<td>2.36</td>
</tr>
<tr>
<td>Moderate</td>
<td>43</td>
<td>18.6</td>
<td>9.76</td>
<td></td>
<td>30</td>
<td>21.3</td>
<td>11.36</td>
<td>2.12</td>
</tr>
<tr>
<td>Severe</td>
<td>28</td>
<td>13.8</td>
<td>6.12</td>
<td></td>
<td>27</td>
<td>19.9</td>
<td>13.05</td>
<td>2.08</td>
</tr>
<tr>
<td>Profound</td>
<td>39</td>
<td>13.6</td>
<td>9.35</td>
<td></td>
<td>34</td>
<td>15.8</td>
<td>12.00</td>
<td>2.41</td>
</tr>
</tbody>
</table>

Total \(N = 242\)

\(p < .05\)
Psychiatric Diagnosis

The distribution of subjects across the seven psychiatric diagnoses is shown in Table 4. Almost 40 percent ($N = 96$) of the subjects received a diagnosis in the category of Disorders of Infancy, Childhood and Adolescence. Schizophrenia had the second largest number of subjects with 36.9 percent ($N = 89$) of the population sampled. The smallest category was Atypical Psychosis with 2 percent ($N = 6$) of the subjects. All of the remaining categories did not vary greatly in size. Table 5 shows the subcategories of psychiatric diagnoses that were collapsed into the major headings of Schizophrenia and Disorders of Infancy, Childhood and Adolescence.

When the ages of institutionalization were examined by psychiatric diagnosis, it was discovered that under the category of Schizophrenia, males were institutionalized at a mean age of 16 years and females at a mean age of 22 years. For Disorders of Infancy, Childhood and Adolescence, the difference between the means was two years, with males being admitted at a mean age of 15 years, and females at a mean age of 13 years.

Of the 242 subjects, 207 or 85.5 percent were receiving psychotropic drugs. The various drugs administered to the subjects are listed in Table 6 along with the frequencies of their prescription. Chlorpromazine (Thorazine), haloperidol (haldol), and thioridazine (Mellaril) accounted for 88 percent of the prescribed drugs. Polypharmacy, or the combination of two or more drugs, accounted for 67 (32.4%) of the cases receiving psychotropic medication.
### TABLE 4

**Distribution of Subjects Across Psychiatric Diagnosis**

<table>
<thead>
<tr>
<th>Psychiatric Diagnosis</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schizophrenia</td>
<td>89</td>
<td>36.92</td>
</tr>
<tr>
<td>Disorders of Infancy, Childhood and Adolescence</td>
<td>96</td>
<td>39.83</td>
</tr>
<tr>
<td>Affective Disorders</td>
<td>11</td>
<td>4.56</td>
</tr>
<tr>
<td>Anxiety Disorders</td>
<td>11</td>
<td>4.56</td>
</tr>
<tr>
<td>Atypical Psychosis</td>
<td>6</td>
<td>2.47</td>
</tr>
<tr>
<td>Personality Disorder</td>
<td>17</td>
<td>7.05</td>
</tr>
<tr>
<td>Organic Mental Disorder</td>
<td>12</td>
<td>4.97</td>
</tr>
</tbody>
</table>
### TABLE 5
**Breakdown of Subcategory Diagnoses Within Major Psychiatric Category**

<table>
<thead>
<tr>
<th>Subcategory</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Schizophrenia</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = 89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disorganized</td>
<td>7</td>
<td>7.86</td>
</tr>
<tr>
<td>Catatonic</td>
<td>2</td>
<td>2.25</td>
</tr>
<tr>
<td>Paranoid</td>
<td>11</td>
<td>12.35</td>
</tr>
<tr>
<td>Schizophreniform</td>
<td>7</td>
<td>7.86</td>
</tr>
<tr>
<td>Residual</td>
<td>30</td>
<td>33.70</td>
</tr>
<tr>
<td>Schizoaffective Disorder</td>
<td>2</td>
<td>2.25</td>
</tr>
<tr>
<td>Undifferentiated</td>
<td>30</td>
<td>33.70</td>
</tr>
<tr>
<td><strong>Disorders of Infancy, Childhood, and Adolescence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = 96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mild MR</td>
<td>4</td>
<td>4.16</td>
</tr>
<tr>
<td>Moderate MR</td>
<td>8</td>
<td>8.33</td>
</tr>
<tr>
<td>Severe MR</td>
<td>9</td>
<td>9.38</td>
</tr>
<tr>
<td>Profound MR</td>
<td>13</td>
<td>13.54</td>
</tr>
<tr>
<td>Conduct Disorder</td>
<td>42</td>
<td>43.75</td>
</tr>
<tr>
<td>Pervasive Developmental Disorder</td>
<td>16</td>
<td>16.66</td>
</tr>
<tr>
<td>Attention Deficit Disorder</td>
<td>4</td>
<td>4.16</td>
</tr>
<tr>
<td><strong>Generic Name</strong></td>
<td><strong>Trade Name</strong></td>
<td><strong>Frequency</strong></td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Amitriptyline</td>
<td>Elavil, Endep</td>
<td>6</td>
</tr>
<tr>
<td>Chlordiazepoxide</td>
<td>Librium</td>
<td>7</td>
</tr>
<tr>
<td>Chlorpromazine</td>
<td>Thorazine, Promapar</td>
<td>69</td>
</tr>
<tr>
<td>Clorazepate</td>
<td>Tranxene</td>
<td>1</td>
</tr>
<tr>
<td>Diazepam</td>
<td>Valium</td>
<td>27</td>
</tr>
<tr>
<td>Doxepin</td>
<td>Sinequan, Adapin</td>
<td>4</td>
</tr>
<tr>
<td>Fluphenazine</td>
<td>Prolixin</td>
<td>3</td>
</tr>
<tr>
<td>Flurazepam</td>
<td>Dalmane</td>
<td>4</td>
</tr>
<tr>
<td>Haloperidol</td>
<td>Haldol</td>
<td>54</td>
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<tr>
<td>Hydroxyzine</td>
<td>Atarax, Vistaril</td>
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<td>Imipramine</td>
<td>Tofranil, Presamine</td>
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<td>Lithium Carbonate</td>
<td>Lithane, Eskalith</td>
<td>21</td>
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<td>Loxapine Succinate</td>
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<td>Mesoridazine Besylate</td>
<td>Serentil</td>
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<td>Moban, Lidone</td>
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<td>Quide</td>
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<td>Generic Name</td>
<td>Trade Name</td>
<td>Frequency</td>
</tr>
<tr>
<td>------------------</td>
<td>------------</td>
<td>-----------</td>
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<td>Thiothixene</td>
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<td>Trifluoperazine</td>
<td>Stelazine</td>
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N = 207
Multihandicapping Conditions

A multihandicapping condition above and beyond mental retardation or emotional disturbance was present in 122 (50.4%) of the subjects. Males accounted for 64 of the multihandicapped subjects, and females accounted for 58. Eighteen of the multihandicapped subjects had two multihandicapping conditions, while three subjects had three multihandicapping conditions. Table 7 shows the distribution of subjects across the seven multihandicapping conditions present in this population of the 122 subjects with multihandicapping conditions. Seizures accounted for 39 percent of the multihandicapping conditions, with visual impairment being the second most frequent at 7 percent. It was found that 40 percent of the seizures and 50 percent of the visual impairments occurred in the profoundly retarded subjects. Of the subjects diagnosed as Schizophrenic, 26 percent (N = 25) had a multihandicapping condition, and 34 percent (N = 32) of those diagnosed with a Disorder of Infancy, Childhood and Adolescence were multiply handicapped. Twenty-six percent of the subjects in this last group had more than one multihandicapping condition.

Psychiatric Diagnosis and Level of Mental Retardation

Table 8 shows the number of subjects within each level of mental retardation by psychiatric diagnosis. Forty-three percent (N = 18) of the mildly retarded individuals, 46 percent (N = 34) of the moderately retarded individuals, and 41 percent (N = 23) of the severely retarded individuals had a diagnosis of Schizophrenia. Of the severely retarded subjects, 41 percent (N = 23) were diagnosed within Disorders of Infancy, Childhood and Adolescence, and 61 percent (N = 45) of the
<table>
<thead>
<tr>
<th>Multihandicapping Condition</th>
<th>Frequency</th>
<th>%</th>
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<tr>
<td>Seizures</td>
<td>96</td>
<td>39.66</td>
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<td>Visual Impairment</td>
<td>18</td>
<td>7.43</td>
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<td>Auditory Impairment</td>
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<td>3.72</td>
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<td>5</td>
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<td>Diabetes</td>
<td>6</td>
<td>2.48</td>
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<tr>
<td>Scoliosis/Hip Deformity</td>
<td>2</td>
<td>0.83</td>
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<tr>
<td>Paralysis</td>
<td>10</td>
<td>4.13</td>
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N = 122
<table>
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<th>Psychiatric Diagnosis</th>
<th>Mild N</th>
<th>Mild %</th>
<th>Moderate N</th>
<th>Moderate %</th>
<th>Severe N</th>
<th>Severe %</th>
<th>Profound N</th>
<th>Profound %</th>
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<tbody>
<tr>
<td>Schizophrenia</td>
<td>18</td>
<td>43.90</td>
<td>34</td>
<td>46.58</td>
<td>23</td>
<td>41.82</td>
<td>14</td>
<td>19.18</td>
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<tr>
<td>Disorders of Infancy, Childhood, and Adolescence</td>
<td>8</td>
<td>19.51</td>
<td>20</td>
<td>27.40</td>
<td>23</td>
<td>41.82</td>
<td>45</td>
<td>61.64</td>
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<td>Affective Disorders</td>
<td>5</td>
<td>12.19</td>
<td>2</td>
<td>2.74</td>
<td>2</td>
<td>3.64</td>
<td>2</td>
<td>2.74</td>
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<tr>
<td>Anxiety Disorders</td>
<td>2</td>
<td>8.87</td>
<td>4</td>
<td>5.48</td>
<td>1</td>
<td>1.82</td>
<td>4</td>
<td>5.48</td>
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<tr>
<td>Atypical Psychosis</td>
<td>1</td>
<td>2.43</td>
<td>4</td>
<td>5.48</td>
<td>1</td>
<td>1.82</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Personality Disorders</td>
<td>6</td>
<td>14.63</td>
<td>4</td>
<td>5.48</td>
<td>3</td>
<td>5.45</td>
<td>4</td>
<td>5.48</td>
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<tr>
<td>Organic Mental Disorders</td>
<td>1</td>
<td>2.43</td>
<td>5</td>
<td>6.85</td>
<td>2</td>
<td>3.64</td>
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<td>5.48</td>
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<tr>
<td>Total N</td>
<td>41</td>
<td></td>
<td>73</td>
<td></td>
<td>55</td>
<td></td>
<td>73</td>
<td></td>
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</tbody>
</table>
profoundly retarded subjects fell into this category. A chi-square analysis of independence was performed on these data and proved to be statistically significant at the .001 level, indicating a relationship between the assigned psychiatric diagnosis and the level of mental retardation.
CHAPTER V

DISCUSSION

Despite evidence in the literature indicating a higher prevalence of emotional disturbance among the mentally retarded, little is actually known about individuals who are both emotionally disturbed and mentally retarded. This lack of information becomes particularly acute when one attempts to examine the relationship between the two diagnoses utilizing the latest revision of the Diagnostic and Statistical Manual, Volume 3 (American Psychiatric Association, 1980). No data exist in terms of prevalence of the emotional disorders or their relationship to mental retardation. Until the present study, virtually no descriptive data were available for individuals identified as both emotionally disturbed and mentally retarded.

The results and implications of this study are discussed according to the research questions posed in Chapter I. Following this discussion is a statement of the limitations of this study, a list of recommendations resulting from the findings, and a final summary.

1. What is the Relationship Between Sex and Age of Institution?

The data analysis for sex shows a larger number of males supporting research results of authors such as Pasamanick and Knobloch (1969) and Richardson and Higgins (1969). It has been suggested that this
higher prevalence of handicaps among males may be a result of either genetic coding, differential societal and cultural expectations of males, or both. It is the opinion of this author that societal and cultural factors play a larger role in this determination than genetics. This argument is developed as the discussion of the data continues.

If one examines the total sample size, there are 134 males and 108 females, a ratio of 5:4. This is lower than one might expect based on figures from other sources. Rosenthal (1970) reports a 4:1 ratio of males to females at first hospital admission, and Beiser (1972) reports a ratio of 2:1 for referrals to a community health center. There is no data that indicates that these ratios exist in established institutionalized populations. How then can one account for this discrepancy in sex ratios from referral and first admission to long term institutionalization? A possible solution can be found in an examination of the data on age.

The data in Table 1 show the means by sex of the subjects' age, the age at which they were institutionalized, and the length of their institutionalization. The males in this study were institutionalized at a mean age of 16 years, an average of three years earlier than the females. It was also found that males with a psychiatric diagnosis of Schizophrenia were institutionalized on an average of six years earlier than females with the same diagnosis. These results are not surprising when compared to findings of other authors (Saenger, 1967; Shellhaus and Nirhira, 1969; Rosenthal, 1970; and Sarason and Sarason, 1980). Identification and institutionalization of emotionally disturbed and mentally retarded, especially mildly mentally retarded individuals is
highly correlated with adolescence. There is evidence to suggest that this is due to parental and community anxiety over increased physical size and strength as well as the attainment of sexual maturity during adolescence. Parents feel they can no longer cope with their child's need for independence and his/her lack of adaptive skills, and the community tends to regard these emotionally disturbed or mentally retarded individuals, especially the males, as a threat to the safety and security of the other community members.

2. What is the Relationship Between Age of Institutionalization and Level of Mental Retardation?

The categorization of subjects in this study into levels of mental retardation (Table 2) illustrates the least number of subjects in the mild range of mental retardation. This supports research by Gibson and Brown (1976), Roos (1978), Eyman and Miller (1978) and Cleland (1979) which concluded that the mildly mentally retarded are being placed into the community leaving the severely and profoundly retarded to fill the beds. In addition the deinstitutionalization efforts, mildly mentally retarded are no longer being admitted to institutions except on rare occasions. In the case of emotionally disturbed mentally retarded individuals in Ohio, the O.A.R.C. v. Moritz Consent Order makes the mildly mentally retarded emotionally disturbed individual the responsibility of the Department of Mental Health. The sample used in this study therefore, is representative of the populations found in Ohio's institutions for the mentally retarded.

The data regarding the length of institutionalization show no difference between the sexes. Both males and females were
institutionalizes an average length of 19 years. For the total sample, males were the youngest subjects (\(\bar{X} = 16\) years old) and were on the average younger than the females (\(\bar{X} = 35\) years old for males as compared to \(\bar{X} = 38\) years old for females. These results indicate that although males call attention to themselves at an earlier age, their reason for being in the institution is no different from or more serious than for the institutionalization of females. This is additionally supported by the data in Table 3. Across all levels of mental retardation, the data indicate an earlier age of institutionalization for the males. Given the severity of the mental retardation is the same for both sexes, why is the male institutionalized at an earlier age? There is evidence in the literature to support the idea that parents tend to seek out assistance earlier for their male offspring than for their female offspring because of the different values and demands that society places on males in our culture (Richardson and Higgins, 1969). It appears that the same affliction in both males and females is viewed for males as either more severe, worthy of earlier attention, more difficult for the family to handle, or a combination of all three. Hence the earlier identification and institutionalization of males. If males are identified earlier than females for the same disability, one could anticipate that they would also be identified for a lesser disabling condition than females. Thus, a male with a mild handicap would tend to be seen as requiring professional attention or intervention, while the female with a similar handicap would be cared for by the family and kept at home. Dependency of the female is more acceptable in our society than dependency of the male.
The high male-female ratios reported by Watt and Szulecka (1979) and Rosenthal (1970) were for first admission to hospitals. It may be that males, while institutionalized at earlier ages and in larger numbers, do not remain hospitalized for long periods of time due to the mild nature of some of their identified disorders. As the mildly handicapped males are released, older females with severe disabilities are being admitted, thereby equalizing the sex ratio of the long term institutional population.

One final interesting feature of the data on age is found in Table 3. For both males and females, the mean age of institutionalization was inversely proportional to the severity of mental retardation. These data exemplify the role of adaptive behavior in mental retardation. Those individuals who demonstrate greater adaptive behavior and thus are less dependent (the mildly mentally retarded), manage to survive longer in the community. Those individuals with the lowest levels of adaptive behavior and are therefore the most dependent (the profoundly mentally retarded) are institutionalized at an earlier age.

3. What is the Relationship Between the Age of Institutionalization and Psychiatric Diagnosis?

In reviewing the data on psychiatric diagnosis, the most striking feature is that 75 percent of the subjects fall into two of the seven major categories. For Schizophrenia, the figure of 36 percent is reasonable when compared to the 25-50 percent estimate for the general population given by Altrocchi (1980) and Sarason and Sarason (1980). Unfortunately, the figures for the other diagnostic categories cannot be evaluated, for there are no estimates available in the literature.
Part of the reason for this is the fairly recent publication of the Third Edition of the *Diagnostic and Statistical Manual* (American Psychiatry Association, 1980), from which these categories were taken and the original diagnoses for the subjects were given. To date there has been little research using this new diagnostic criteria for the general population, and it is safe to say that this present study is the only available analysis of prevalence of psychiatric diagnoses among the mentally retarded using this criteria. So for now, these data stand alone as a basis of comparison for future research in this area.

When the ages of institutionalization were examined by psychiatric diagnosis, it was discovered that under the category of Schizophrenia, males were institutionalized at a mean age of 16 years and females at a mean age of 22 years. This supports reports by Sarason and Sarason (1980) indicating that male schizophrenics are hospitalized an average of six to ten years earlier than female schizophrenics. No other data exists in the literature with which to compare these findings. Subjects in this study with a psychiatric diagnosis of Disorders of Infancy, Childhood and Adolescence were institutionalized at the earliest average age ($\bar{X} = 14$ years). This is not surprising when one considers that this psychiatric category also contains the most individuals at the lower levels of mental retardation.

Eighty-five percent of the subjects in this study were found to be receiving psychotropic drugs as part of their treatment. When this is compared to some of the other surveys by Lipman (1971), Sprague (1975) and Rivinus (1980), these figures seem rather high until one takes into account that the other surveys were conducted on individuals
who had a single diagnosis of mental retardation. Psychopharmacological treatment is far more common in a psychiatric setting and this could account for the increased occurrence of psychotropic drug prescription with this emotionally disturbed mentally retarded population. The figure for polypharmacy seems well within reasons when compared to the surveys by Lipman (1971) and Sprague (1975). The three most frequently prescribed drugs, chlorpromazine, thioridazine, and haloperidol are the ones reported by Rivinus (1980) to be the most widely tested for use in the mentally retarded emotionally disturbed individual.

Any further discussion of the implications of the data on psychotropic drugs would require a medical explanation and is beyond the scope of this study.

4. What is the Relationship Between Multihandicapping Conditions and Level of Mental Retardation?

5. What is the Relationship Between Multihandicapping Conditions and Psychiatric Diagnosis?

Fifty percent of the sample ($N = 122$) in this study had a multihandicapping condition. This figure falls within the ranges reported by Wolf and Anderson (1969) and Rotter, Tizard and Whitmore (1970) for mentally retarded individuals other than the data presented in this study. There are no prevalence figures for emotionally disturbed mentally retarded individuals. The prominent multihandicapping condition was seizure disorder, accounting for 39 percent of the subjects with a multihandicapping condition. This is higher than the 17 percent figure estimated by Meyen (1980) and indicates a possible relation to the added diagnosis of emotional disturbance. No figures on the incidence of seizures among the emotionally disturbed were available.
The higher percentage of multihandicapping conditions among the profoundly retarded is not surprising since they as a group tend to be more multihandicapped than any of the other levels of mental retardation. A handicap such as a visual impairment, at any level of mental retardation would tend to make the retardation more severe by limiting the individual in terms of effective ways of dealing with life situations.

With one out of every two emotionally disturbed mentally retarded individuals also exhibiting a multihandicapping condition, the stress-vulnerability theories of Rosenthal (1970) and Sarason and Sarason (1980) become particularly salient. The least that one can conclude is that multihandicapped individuals are "at risk" for behaving in such ways as to be labelled emotionally disturbed, mentally retarded, or both. The results of the data on multihandicapping conditions and the reasons for the various findings are not immediately clear. However, it is best not to interpret these findings as chance occurrences because other research has reported similar trends (Rutter, Tizard and Whitmore, 1970; Wishik, 1969; Cruickshank, 1969; and Wolf and Anderson, 1969).

6. What is the Relationship Between Level or Mental Retardation and Psychiatric Diagnosis?

The most interesting result of the data analysis is the relationship found between Schizophrenia and mild, moderate and severe mental retardation, and the equally apparent relationship between Disorders of Infancy, Childhood and Adolescence and severe and profound mental retardation. This is a finding which has been either nonexistent, unrecognized or given little attention in the literature. Past researchers
have reported a high prevalence of schizophrenia among the mentally retarded, and in particular the mildly mentally retarded (Tredgold, 1947; Penrose, 1945; Craft, 1959; and Phillips, 1977), but no other relationships between psychiatric diagnosis and level of mental retardation has been reported. Part of the increased incidence of schizophrenia among the mildly mentally retarded can be explained by the fact that in the general population schizophrenia accounts for 25 to 50 percent of all emotional disturbance, and 85 percent of the mentally retarded population is categorized as mildly mentally retarded. The relationship of Schizophrenia to moderate and severe mental retardation as well as mild, and the relationship of Disorders of Infancy, Childhood and Adolescence to severe and profound mental retardation can be explained in part by the behavioral characteristics that are part of the diagnostic criteria for these psychiatric diagnoses. The diagnostic criteria for Disorders of Infancy, Childhood and Adolescence (American Psychiatry Association, 1980) lists behaviors such as inattention, hyperactivity, impulsiveness and unresponsiveness, as well as a gross deficit in language, as indicative of the presence of the emotional disturbances in this category. However, these are precisely the types of behaviors and deficits one would expect to find among a group of severely and profoundly mentally retarded individuals. A similar situation exists for the diagnostic criteria for Schizophrenia. An individual receiving a diagnosis of Schizophrenia should exhibit delusions, hallucinations, a loosening of association, illogical thinking, or a poverty of speech content. The mildly and moderately mentally retarded have better speech and language skills than the severely and profoundly mentally retarded, but
still suffer from lack of social experience and difficulties in conceptu­
alization, and problem solving. Taking this into account it is not sur­prising to find that they are placed into the category of schizo­
phrenia in disproportionate numbers. The question then becomes, at what point do the behaviors of these individuals cease to be part of the syndrome of mental retardation and begin to indicate the presence of an emotional disturbance? The nearly impossible nature of making a clinical determination such as this is obvious. It is this author's opinion that the time would be better spent in habilitation of the indi­
dividual rather than in making this determination.

Limitations of the Study

This study shares the same limitation with many of the past studies in that the population of subjects was institutionalized. Be­cause of the institutionalized nature of the population, there is a chance that the sample may have an overrepresentation of aggressive indi­
dividuals. It is quite possible that studies utilizing only institu­tionialized populations are systematically ignoring the passive and with­drawn individuals who tend not to be institutionalized with the same frequency as the aggressive individuals. Therefore the generality of the results of this study are limited to an institutionalized popula­tion in the state of Ohio.

Implications

The results of the data analysis have several important implica­tions for the administrative planning and the habilitation and treat­ment of individuals who are emotionally disturbed, mentally retarded, or both.
First, because the data show that males with disabilities equal to that of females are institutionalized at an earlier age, there must exist a need for parent and community education to counteract differential societal attitudes towards males as well as assist parents and communities in finding ways of dealing with these individuals. Community health centers available in the community are not trained to deal with individuals who are mentally retarded. Nor are mental retardation agencies able to cope with emotionally disturbed individuals. Community resources must be expanded and the staff trained to deal with lower functioning and emotionally disturbed clients if these individuals are ever to remain in the community. There also exists a need for parental support groups to assist parents of individuals who are both mentally retarded and emotionally disturbed deal with their unique problems and needs.

Second, individual with multihandicapping conditions should be considered "at risk" for exhibiting maladaptive behaviors that will lead to them being labeled as mentally retarded, emotionally disturbed, or both. Preventative measures should be stressed with these individuals, and adaptive behaviors and skills should begin being taught at the earliest possible date of intervention.

Third, the major finding of this study suggests an interrelationship between psychiatric diagnosis and the behavioral characteristics of mental retardation. This points out a great need for better trained staff in both the areas of mental health and mental retardation. Psychiatrists need to be a contributing staff member at facilities dealing
with the mentally retarded and staff at mental health facilities need to better understand the unique problems of the mentally retarded.

Fourth, the high percentage of institutionalizations occurring during the adolescent years points out a need for professional to be aware of this crisis point and the possibility of prevention through early intervention.

Fifth, administrative planning must be done in an atmosphere of increased awareness of the need to deliver both mental health and mental retardation services to single individuals. Unfortunately, states such as Ohio have recently switched to a split-system, making it increasingly difficult to coordinate dual services. Hopefully, service delivery systems will return to the generic approach at a higher level of sophistication and understanding of the current and future problems.

**Recommendations for Future Research**

The descriptive data derived from this research, while having some inherent value, will contribute maximally only if they are used as a basis for further investigation into the behavioral correlations of emotional disturbance and mental retardation. With this in mind, the following recommendations for future research are made:

1. A replication of this analysis on a national level to determine if the findings of this study are unique, or representative of individuals who are identified as both emotionally disturbed and mentally retarded and residing in Ohio's institutions.
2. Identification of individuals in the community who are diagnosed as both emotionally disturbed and mentally retarded to determine if the past and present research has been systematically ignoring the passive and withdrawn individuals.

3. More detailed research on the prevalence of emotional disturbances and mental retardation among the multihandicapped to assist in the educational/vocational planning of these individuals.

4. Further research into the correlation of psychiatric diagnoses and the behavioral characteristics of the various levels of mental retardation to determine if the patterns found in this study are indicative of a diagnostic trend, or if new patterns emerge.

5. Expanded research in the area of seizures to determine the relationship, if any, between seizure activity and psychological disturbances.

Summary

This study was an attempt to analyze the characteristics of a population of individuals diagnosed as both emotionally disturbed and mentally retarded. Examining the information contained in the comprehensive evaluations of 108 females and 134 males residing in Ohio's institutions for the mentally retarded and developmentally disabled, several interesting characteristics and relationships were noted.
First, over one-half of the population sampled had a multihandicapping condition above and beyond the dual diagnosis of emotional disturbance and mental retardation. Seizures accounted for the largest percentage of the multihandicapping conditions. Second, the males in this study were institutionalized at an earlier age than the females, and this institutionalization occurred during adolescence. There was no statistically significant difference in the length of institutionalization for males versus females, nor in the reason for their institutionalization. Third, there exists a relationship between the psychiatric diagnosis of Schizophrenia and the levels of mild, moderate and severe mental retardation, and the psychiatric diagnosis of Disorders of Infancy, Childhood and Adolescence and the levels of severe and profound mental retardation. Initial indications suggest a relationship between psychiatric diagnosis and the behavioral characteristics found at the various levels of mental retardation.

This study, while contributing a substantial amount of data to the existing void, also points out the desperate need for further research into the little understood phenomenon of the emotionally disturbed, mentally retarded individual.
APPENDIX A

LETTERS OF PERMISSION TO USE DATA
April 27, 1981

Susan Arnoczky
Nisonger Center, Rm. 488
1580 Cannon Dr.
Columbus, OH 43210

Dear Ms. Arnoczky:

This is in response to your request to have access to comprehensive evaluations performed upon members of the plaintiff class in OARC v. Kurtz for research purposes. It is my understanding that the information to which you are seeking access includes material relating to individual clients and is in personally identifiable form.

Access to records of individuals hospitalized under Chapter 5122 O.R.C. is governed by Section 5122.31 O.R.C. Access to records of individuals institutionalized under Chapter 5123 O.R.C. is governed by Section 5123.89 O.R.C. Copies of these statutes are enclosed for your information.

Pursuant to these statutes, it appears to me that you are entitled to have access to the records you seek only under the following circumstances:

1) All information which directly or indirectly identifies the individual has been removed; or

2) Written consent has been obtained from the individual or his guardian.

Alternatively, you may have access to certain records in the custody of the Department of Mental Retardation and Developmental Disabilities, if such access is relevant to the performance of your personal service contract with that agency.

Finally, I can not agree with the opinion of Myers R. Kurtz, expressed in his letter to you of April 17, that records of evaluations performed pursuant to the Consent Order for Preliminary Injunction were not performed for the purpose of Chapter 5122, in which case Section 5122.31 O.R.C. would not apply. The purpose of Chapter 5122 O.R.C. is to regulate the hospitalization of the mentally ill, and these records were clearly created for that purpose.
Please feel free to contact myself or Grant Shoub of this office should you have further questions.

Sincerely,

Barry Cohen

Enclosure

BC/lmj
May 11, 1981

Susan Arnoczky
Nisonger Center, Room 488
1580 Cannon Drive
Columbus, Ohio 43210

Dear Sue:

This is to inform you that I have approved your request to have access to this Department's OARC vs. Kurtz comprehensive evaluations that were performed in conjunction with your personal service contract with this Department.

If you have any problems, please contact me or Jim Flewellen.

Sincerely,

Rudy Magnone, Ph. D.
Director

RM: JF: mc
APPENDIX B

O.A.R.C. v. Moritz FINAL CONSENT ORDER
IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF OHIO
EASTERN DIVISION

OHIO ASSOCIATION FOR
RETARDED CITIZENS, et al.,
Plaintiffs,

vs.

TIMOTHY B. MORITZ, et al.,
Defendants.

Civil Action No. C-2-76-398

JUDGE DUNCAN

FINAL CONSENT ORDER

I. Preliminary Statement

On May 25, 1976, Plaintiff Ohio Association for Retarded Citizens and three
other plaintiffs filed this Complaint in which they alleged the systematic
depprivation of services to clients residing in institutions operated by the Ohio
Department of Mental Health and Mental Retardation who are labeled by the
defendants as exhibiting emotional disorders and functioning at any level of mental
retardation. Brought as a class action under the Federal Civil Rights Act, the
Rehabilitation Act of 1973, and the Developmentally Disabled Assistance Act,
plaintiffs sought class certification, a declaration that the practices and conditions
maintained by the defendants violate their constitutional and statutory rights, and
an injunction ordering defendants to perform comprehensive evaluations on all class
members and provide an appropriate system of mental health and mental
retardation services to them by means of identified service providers. The
Complaint named as the defendants, Dr. Timothy B. Moritz, Director of the Ohio
Department of Mental Health and Mental Retardation, the existing Commissioners
of Mental Health and Mental Retardation and Developmental Disabilities, and three
Superintendents of state institutions.

On August 6, 1976, the Defendants served their Answer to the Complaint of
the plaintiffs in which they denied the truth of all material allegations contained
therein.
After the plaintiffs had filed a Motion To Certify The Class pursuant to Rule 23(b)(2) of the Federal Rules of Civil Procedure, on January 5, 1977, this Court conditionally certified as a proper class the class of every individual who is both (a) residing at the time of the filing of this suit or who will be residing during the pendency of this suit in a state mental retardation institute or a state mental hospital in Ohio; and (b) labeled by the defendants or their agents as functioning at any level of mental retardation and exhibiting through his/her behavior an emotional disorder such as neurosis, psychosis, or personality disorder.

Subsequently, on April 19, 1977, the Court approved and filed a Consent Order For Preliminary Injunction in which the parties agreed to certain actions and procedures which the defendants and their agents were to follow with respect to certain class members. More particularly, the parties agreed that the defendants would conduct comprehensive evaluations on 300 class members, establish six special units in which 48 of these clients would receive special services, and conduct an evaluation of these units and programs after they had operated for a specified period of time. Other general provisions were also agreed to. The order was to expire on June 30, 1979, a trial on the merits, or a final settlement of the litigation whichever was sooner.

Subsequent to the expiration of this Consent Order, the parties entered into extensive negotiations in attempting to reach a final settlement of this litigation. This matter is now before the Court because that process has proven successful and the parties have reached agreement upon the actions to be taken and procedures to be followed by the defendants, which will finally resolve the dispute giving rise to plaintiff's Complaint.

The jurisdiction of this Court is proper under 28 U.S.C. Sections 1343(3) and (4), and 28 U.S.C. Sections 2201 and 2202 for purposes of this Order.

The defendants do hereby consent to the Order which follows. By consenting to this Order, defendants are not admitting that any of the constitutional or statutory violations alleged in plaintiffs' complaint are true, that they have failed to engage in the practices hereby required, or that they in any way are legally obligated to engage in such practices. In fact, they expressly deny that any of this is true. Instead, they are consenting to this Order because they and the plaintiffs are mutually desirous that the actions and practices herein required occur in the manner herein agreed to.
Therefore, it is ORDERED, ADJUDGED, and DECREED that the defendants and their Agents, Employees, Assigns, Successors in Office, and all those in active concert and participation therewith are enjoined to comply with the Order which follows. The Court shall retain jurisdiction over this matter until it is satisfied that the Order has been fully complied with at which time this action shall be dismissed.

II. Definitions

For purposes of this Order, the following definitions of terms shall apply:

CLIENT means a resident or patient of a Department of Mental Health and Mental Retardation developmental center or hospital.

CONSENT ORDER UNIT means a special unit established by the Consent Order for Preliminary Injunction in this case.

DEPARTMENT means Department of Mental Health and Mental Retardation.

DEVELOPMENTAL CENTER means a Department of Mental Health and Mental Retardation facility under the managing authority of the Division of Mental Retardation.

FINAL ORDER UNIT means a special unit established by this Order.

HABILITATION means the process by which the staff of a developmental center assists a client to acquire and maintain those life skills which enable him to cope more effectively with the demands of his own person and of his environment and to raise the level of his physical, mental, social, and vocational efficiency. Habilitation includes but is not limited to programs of formal, structured education and training.

HOSPITAL means a Department of Mental Health and Mental Retardation facility under the managing authority of the Division of Mental Health.

MENTAL DISORDER means a diagnosis as contained in the Diagnostic and Statistical Manual of Mental Disorders III, American Psychiatric Association.

MENTALLY RETARDED means a person having significantly subaverage general intellectual functioning existing concurrently with deficiencies in adaptive behavior, manifested during the developmental period. Mental retardation is a diagnosis based upon a score on a test of general intellectual functioning and a measure of adaptive behavior. Levels of mental retardation may be categorized as
mild, moderate, severe, and profound determined pursuant to the provisions of the Manual on Terminology and Classification in Mental Retardation, Herbert J. Grossman, M.D., Editor, American Association on Mental Deficiency.

PSYCHIATRIST means a physician with three years of psychiatric residency.

III. Provisions

A. Evaluation and Habilitation/Treatment Plans

1. Within 90 days of the effective date of this Order, defendants shall review the records of all clients previously identified in the Department's task force survey referenced in Attachment A of the Consent Order for Preliminary Injunction in this case.

This records review shall determine the following relative to clients previously identified in the task force survey:

a. those clients who have died;

b. those clients who have been discharged;

c. those clients for whom the decision to identify them in the task force survey was based upon a written opinion in the client's record made by other than a qualified professional; and

d. those clients who have had a comprehensive evaluation within the twelve months preceding the effective date of this Order.

Defendants shall provide to plaintiffs' attorney the names and categories of the clients determined in a., b., c., and d. above.

2. For each client previously identified in the task force survey who does not meet the provisions of either a., b., c., or d. above, a comprehensive evaluation shall be performed per the provisions of this Order within twelve months from the effective date of this Order.

3. Each comprehensive evaluation shall be completed by a team of professionals consisting of individuals who are qualified in the fields of medicine, education, psychology, and social work.

For purposes of this Order the individuals participating in the
comprehensive evaluation in the fields of education, psychology, and social work shall be persons who are certified pursuant to the requirements of R.C. 5123.68(C). If the client being evaluated is not receiving psychotropic medication at the time of the comprehensive evaluation, the individual involved in the comprehensive evaluation in the field of medicine shall be certified pursuant to the requirements of R.C. 5123.68(C). If the client being evaluated is receiving psychotropic medication at the time of the comprehensive evaluation, a psychiatrist shall be the individual qualified in the field of medicine. It is not necessary for the psychiatrist to be certified in accordance with the requirements of R.C. 5123.68(C).

4. Each comprehensive evaluation shall include the following:
   a. written summaries of three observations of the client, which observations shall be made by at least one member of the team, and be one hour each, not all on the same day;
   b. summaries of conversations with employees assigned to the ward where the client resides; and
   c. a review of the client's existing record.

5. In developing the comprehensive evaluation, the team shall consider the following:
   a. what handicapping conditions in addition to mental retardation and mental disorder contribute to the client's deficits in adaptive behavior; and
   b. the possibility that the client's immediate physical environment, including the other clients who come in contact with the client, adversely affects the client's behavior.

6. In addition to recording the client's functional level, the team shall record as part of the comprehensive evaluation the nature and, where possible, the frequency, intensity, and duration of the client's aberrant behavior. If the actual
frequency, intensity, and duration of the client's aberrant
behavior cannot be recorded, an explanation shall be docu-
mented of the reasons why such cannot be recorded. In
recording a client's behavior, teams in developmental centers
shall use the "Behavior Characteristics Progression"; teams in
hospitals shall use one or more of the following professionally
accepted instruments for measuring adaptive behavior: the
"Adaptive Behavior Scale" of the American Association on
Mental Deficiency, the "Behavior Characteristics Progression",
or the "Progress Assessment Chart."

7. At the time of completion of the comprehensive evaluation, if
the team determines that a client in a hospital does not meet
the definition of mental retardation as set forth herein, that
conclusion shall be set forth in the comprehensive evaluation.
The materials used for community placement of the client
shall contain the current comprehensive evaluation. Any
reference to mental retardation in the client's record which is
not determined through the comprehensive evaluation shall not
be included in the community placement materials.

8. At the time of completion of the comprehensive evaluation, if
the team determines that a client in a developmental center
does not have a mental disorder as defined herein which
mental disorder would prevent the client from participating in
those developmental center or community programs needed for
the client's habilitation, that conclusion shall be set forth in
the comprehensive evaluation. The materials used for com-
munity placement of the client shall contain this comprehen-
sive evaluation. Any reference to mental disorder in the
client's record which is not determined through the compre-
hensive evaluation shall not be included in the community
placement materials.

9. At the time of completion of the comprehensive evaluation, if
the team concludes that the client is mentally retarded and
has a mental disorder which would prevent him from partici-
pating in those programs needed for his habilitation and as a result he requires specialized services therefor, the team shall set forth such conclusion in the client's comprehensive evaluation.

10. Upon the completion of the comprehensive evaluation, the team shall prepare an individualized habilitation/treatment plan for each client identified per the requirements of A.9. above. This plan shall be directed at providing services for the client's mental disorder, mental retardation, and when present, other developmental disabilities. The individualized habilitation/treatment plan shall include the following:

a. specific measurable goals for the needed services;
b. specific needed activities to be provided for each service;
c. any special treatment considerations to be used in response to the client's behavior problems;
d. measurable criteria for determining progress toward, and achievement of, the stated goals; and
e. indicators of insufficient progress, or other contingencies, that would require the services and goals to be changed.

11. Within 90 days of the completion of the comprehensive evaluation and the individualized habilitation/treatment plan, the services necessary to implement the goals described in the plan shall be provided to the client unless the professionals who customarily deliver the services called for cannot be employed by the developmental center or hospital through reasonable recruitment efforts. Attorney for the plaintiffs shall have access to the documentation of recruitment efforts. If the professionals who customarily provide the services recommended cannot be employed after reasonable recruitment efforts, the developmental center or hospital shall attempt to provide the services called for utilizing other staff who are capable and competent to provide the services recommended.
B. Consent Order Units and Final Order Units

1. The six (6) Consent Order Units at Columbus Developmental Center, Longview State Hospital, Massillon State Hospital, Orient Developmental Center, Toledo Mental Health Center, and Warrensville Developmental Center shall be continued and maintained in accordance with the requirements of paragraphs B.2.-B.4. of the Consent Order. However, for purposes of computing direct care staff-to-client ratio, mental health technicians and registered nurses who perform direct care duties shall be included as direct care staff.

2. Each of the following facilities operated by the Department shall within one year of the effective date of this Order establish a Final Order Unit to serve clients identified pursuant to paragraph A.9. of this Order: Division of Mental Health—Cambridge Mental Health Center, Central Ohio Psychiatric Hospital, Dayton Mental Health Center; Division of Mental Retardation—Cambridge Developmental Center, Tiffin Developmental Center, and Youngstown Developmental Center. Each of these Final Order Units shall serve a minimum of eight (8) clients unless fewer than eight (8) clients are identified at each facility as needing such specialized services. In such a situation, after notifying plaintiffs' attorney, a Final Order Unit does not have to be established at that facility.

3. The Final Order Units shall meet the program standards/requirements of paragraph B.4. of the Consent Order and shall also meet Medicaid Intermediate Care Facilities/Mentally Retarded standards.

4. Each Final Order Unit shall be directed by a qualified mental retardation professional as defined by R.C. 5123.68(C).

5. Each Final Order Unit shall have a psychiatrist available for at least one (1) hour per week for each client of the unit for the purpose of psychiatric consultation unless a psychiatrist cannot be employed through reasonable recruitment efforts. Attorney
for the plaintiffs shall have access to documentation of recruitment efforts.

6. In addition, the Division of Mental Retardation will within 180 days of the effective date of this Order employ or contract with psychiatrist(s) according to the ratio of one (1) psychiatrist for every 300 clients in developmental centers identified as needing the specialized services referenced in paragraph A.9. above, unless a psychiatrist cannot be employed through reasonable recruitment efforts. Attorney for the plaintiffs shall have access to documentation of recruitment efforts. These psychiatrists shall provide psychiatric services to any client in need of psychiatric services. They shall be in addition to physicians employed by developmental centers for other medical services.

7. Each Consent Order Unit shall within 120 days of the effective date of this Order develop written guidelines stating the criteria upon which decisions for admitting clients to, or discharging clients from, the unit are based. Admissions to and discharges from each Consent Order Unit shall be governed by the criteria developed.

8. Each Final Order Unit shall within 120 days of its first day of operation develop written guidelines stating the criteria upon which decisions for admitting clients to, or discharging clients from, the unit are based. Admissions to and discharges from each Final Order Unit shall be governed by the criteria developed.

C. Training

1. All staff regularly assigned to a Consent Order Unit and a Final Order Unit shall receive appropriate orientation and in-service training. The orientation and in-service training programs for developmental centers shall be approved by the individual within the Division of Mental Retardation who is charged with the programmatic responsibility for the Division
of Mental Retardation; the orientation and in-service training programs for hospitals shall be approved by the individual within the Division of Mental Health who is charged with the programmatic responsibility for the Division of Mental Health. Copies of the approved orientation and in-service training programs shall be provided to plaintiffs' attorney.

2. Each developmental center and hospital which operates a Consent Order Unit shall within 120 days of the effective date of this Order develop a written description of the program options provided by that unit. Each developmental center and hospital which operates a Final Order Unit shall within 120 days of the first day of its operation develop a written description of the program options provided by that unit. A copy of said description shall be sent by each unit to every other unit and to the attorney for the plaintiffs.

3. The directors of the Consent Order Units and Final Order Units shall meet four times per year to discuss programs, progress made, problems encountered, and possible solutions to problems. Plaintiffs' attorney shall be notified two (2) weeks in advance of each meeting and shall be allowed to attend such meetings.

4. Each developmental center and hospital which operates a Consent Order Unit shall within 150 days of the effective date of this Order develop in-service training on the provision of services to clients who are both mentally retarded and mentally disordered for other staff in that developmental center or hospital who request such training. Each developmental center or hospital which operates a Final Order Unit shall within 150 days of the first day of its operation develop in-service training on the provision of services to clients who are both mentally retarded and mentally disordered for other staff in that developmental center or hospital who request such training. The in-service training program for developmental centers shall be approved by the individual
within the Division of Mental Retardation who is charged with the programmatic responsibility for the Division of Mental Retardation; the in-service training program for hospitals shall be approved by the individual within the Division of Mental Health who is charged with the programmatic responsibility for the Division of Mental Health. Copies of the approved in-service training programs shall be provided to plaintiffs' attorney.

D. Community Services

1. Within 180 days of the effective date of S.B. 160 (113th General Assembly), the Department shall by Administrative Rule require planning for provision of psychiatric services to mentally retarded clients by county boards of mental retardation in counties where clients identified per paragraph A.9. of this Order are to be placed from Department developmental centers.

2. Within 180 days of the effective date of this Order, the Department shall by Administrative Rule require planning for provision of mental retardation services to mentally ill clients by community mental health and mental retardation boards in counties where clients identified per paragraph A.9. of this Order are to be placed from Department hospitals.

3. Contingent upon the passage of H.B. 834 (113th General Assembly), the Department shall solicit, and give priority to, applications for community capital construction funds for residential projects which would solely serve clients identified per paragraph A.9. of this Order to be placed from developmental centers and hospitals.

IV. Attorneys Fees And Other Court Related Costs

The plaintiffs and their attorneys hereby agree to waive any right to attorneys fees pursuant to 42 U.S.C. Section 1988 or any other method of recovery of such fees or other court related costs which they may have as a result of
prosecuting this Complaint. Therefore, the Court hereby finds that neither the plaintiffs nor their attorneys shall be entitled to any attorneys fees or other court costs as a result of prosecuting this action.

V. Mandatory Conciliation

If at any time during the period for which this Order is in effect either Party or their attorneys have reason to believe that the other Party or their Agents are violating any provision thereof, they first shall in writing, notify the other Parties and their attorneys of the specific basis for such belief. Within a reasonable time thereafter, the Parties shall negotiate to attempt to resolve any such dispute. Only after such negotiation and failure of the Parties to reach a resolution of such dispute shall either Party take any court action for an order that the other Party show cause why they should not be held in contempt of court.

IT IS SO ORDERED; this __________ day of ________________, 1980.

ROBERT M. DUNCAN
United States District Judge
Approved By:

DOUGLAS ROGERS
Director, Ohio Legal Rights Service
Attorney for Plaintiffs

WILLIAM J. BROWN
Attorney General

GEORGE STRICKER, JR.
Assistant Attorney General
Attorneys for Defendants

TIMOTHY B. MORITZ, M.D.
Director, Ohio Department of Mental Health and Mental Retardation
REFERENCE NOTE

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