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A Study of the Effects of a Theatrical Performance Program (Wheelchair Dance) on the Mood States of Adolescents who have Duchenne Muscular Dystrophy

by

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Abstract

This study investigated the mood states of adolescents who have Duchenne Muscular Dystrophy. The specific purpose was twofold. First, to examine whether there were differences in the mood states of adolescents who have Duchenne Muscular and able-bodied adolescents. And second, to explore and evaluate whether participation in a theatrical performance program had a positive effect on the mood states of the adolescents who have Duchenne Muscular Dystrophy.

The primary source of data was: the results of the Profile of Mood States (POMS) rating scale. The test/retest method was used during the 1987-88 school year. Subjects consisted of six adolescents who have Duchenne Muscular Dystrophy at the Mackay Center, an institution for persons who are deaf and profoundly physically disabled. Additional sources of data were: subject and teacher interviews.

The statistical findings indicated that there were significant initial and concluding differences in the mood states of the adolescents who have Duchenne Muscular Dystrophy and their able-bodied cohorts. Analysis of the theatrical performance program indicated a short-term pre-post treatment improvement in the mood states of the adolescents who have

Duchenne Muscular Dystrophy. This short-term improvement, however, did not sustain itself over time.

Some suggestions for further research are presented.

Résumé

Cette recherche a porté sur la question de l'état d'esprit chez les adolescents souffrant de la dystrophie musculaire Duchenne. Le but spécifique de la recherche a été au double. D'abord, d'examiner s'il existait des différences entre l'état d'esprit des adolescents qui ont la dystrophie musculaire Duchenne et celui des adolescents sains de corps. Ensuite, le deuxieme but lié à ce travail a été d'explorer et d'évaluer si la participation à un programme de performance théâtrale a eu un effet positif sur l'état d'esprit des adolescents qui souffrent de la dystrophie musculaire Duchenne.

La source principale de données a été les résultats obtenus au moyen de l'échelle "Profile of Mood States" (POMS). Le protocole prétest et posttest a été utilisé durant l'année scolaire 1987-88. Les sujets au nombre de six ont été choisis parmi les adolescents qui souffrent de la dystrophie musculaire Duchenne, du Centre Mackay, une institution pour les sourds et les adolescents souffrant d'un sérieux handicap physique. Les autres sources de données recueillies ont été des entrevues avec les sujets et le professeur.

Les conclusions statistiques ont indiqués qu'il y avait des differences initiales et finales marquees quant à l'état

d'esprit des adolescents qui ont la dystrophie musculaire Duchenne et leur cohorte robuste. Une analyse du programme de performance théâtrale a démontré une amélioration à court terme pré-post dû au traitement, quant à l'état d'esprit des adolescents qui ont la dystrophie musculaire Duchenne. Cependant, cette amelioration à court terme n'a pas subit le test de temps.

Des suggestions pour une recherche subséquente sont offertes.

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Chapter 1: Introduction

Creative dramatics are viewed by many to foster psychological health. Involvement provides one with the opportunity to make a statement about one's identity which in turn appears to be a catalyst for improved confidence and self-esteem. In addition, creative dramatics provide an avenue for self-expression which furthers the development of one's innermost qualities thus allowing for optimal functioning (Courtney, 1988).

A fundamental purpose of creative dramatics is personality growth. Through creative dramatics it appears that one gains an increased awareness of his or her senses, body, imagination, and intellectual capabilities as well as the tools by which to sharpen their social skills (Warger, 1985).

This study explores the effects of theatrical performance (wheelchair dance) on the mood states of adolescents who have Duchenne Muscular Dystrophy. Specifically, this exploration will test the following hypotheses:

1. That there are differences in the mood states of adolescents who have Duchenne Muscular Dystrophy and able-bodied adolescents.

2. That participation in a theatrical performance program will have a positive effect on the mood states of the adolescents who have Duchenne Muscular Dystrophy.

The Issue

Muscular Dystrophy is a chronic inherited disorder characterized by progressive weakening and deterioration of the voluntary skeletal (striated) muscles. Muscular Dystrophy is inherited but may occur spontaneously as a result of genetic mutation. Although many sufferers present symptoms early in life the onset may come at any age depending on the form of the disorder (Milhorat, 1977).

Duchenne Muscular Dystrophy is the most serious and debilitating form of muscular dystrophy. It is a sex linked recessive disorder almost exclusively affecting males. Duchenne Muscular Dystrophy increasingly robs the body of movement and in the advanced stages of the disorder one loses the power to breathe, thus succumbing to respiratory failure or cardiac arrest. While evidence of the disorder may be present at birth, clinical symptoms usually become apparent between the ages of two and six with a lag in motor milestones (Muscular Dystrophy Association of Canada, 1984).

Duchenne Muscular Dystrophy severely limits the lives of those afflicted with the disorder. While Duchenne Muscular Dystrophy increasingly denies the body of movement, it does not affect the mind (Wolf, 1983). Individuals who suffer from Duchenne Muscular Dystrophy are fully aware of their failing physical condition and how they are becoming increasingly challenged in their daily activities. In spite of this these individuals want to actively engage their environment. Society, however, has not allowed this to happen. Not by actively restricting experiences, but by imposing different social standards upon these individuals and having different expectations for them (Weinberg-Asher, 1976; Siwek, 1983).

What results is a group of individuals who wish to take an active role in their lives and a society which "tailors" activities and lowers expectations on the basis of a set of physical characteristics (Goffman, 1963) in order that individuals who are disabled not fail (Weinberg-Asher, 1976; Siwek, 1983).

Over time individuals with handicaps may internalize the attitudes and perceptions of society. This in conjunction with poor body image and the realities presented by the physical handicap bring about a lessening of self-worth which, if not remedied, can lead to emotional problems (Meyerson, 1948; Richardson, et al., 1961; Epstein, 1980; Seigal, et al.,

1990).

The present study examines the mood states of adolescents who suffer from Duchenne Muscular Dystrophy and how participation in a theatrical performance program (wheelchair dance) affects mood states.

In defining mood, for the purposes of this study, a brief explanation of affect and emotion is necessary. Affect and emotion are interchangeable terms used to describe the feelings, enjoyable or not enjoyable, that are attached to ideas, feelings such as rage, grief, and joy. Through these feelings a general attitude or habitual affective state is established which colors interactions with the environment. Affect can therefore be considered the motive to action evident in day to day functioning as well as the determining factor in the thoughts and actions of an individual, both in health and in sickness. When an affective state is maintained for a lengthy period of time and is pervasive, one then speaks of a mood (Freedman & Kaplan, 1967).

Studies examining the effect of physical disability upon personality have focused on three main assumptions: 1) Specific forms of physical disability are associated with specific personality types, 2) Certain types or degrees of disability in themselves cause psychological maladjustment, and

3) Different disabilities may result in similar environmental experiences due to similarly imposed functional limitations (Schontz, 1970).

Harper & Richman (1978) found adolescents with orthopedic disabilities to show an isolative and passive orientation to interpersonal interaction as well as generalized feelings of alienation. This behavioral inhibition displayed in adolescence appears to hold into adulthood. Richman & Harper (1980) found young adults with physical disabilities continue to display feelings of social alienation and a distant orientation to interpersonal interaction.

The next chapter investigates the literature on Duchenne Muscular Dystrophy (DMD), the emotional adjustment to physical disability, the personality profiles of the physically disabled, and creative dramatics as an intervention with disabled individuals.

Chapter 2: Review of Literature

The purpose of this study is to determine the effects of a theatrical performance program (wheelchair dance) on the psychological mood profiles of Duchenne Muscular Dystrophy adolescents. It is hypothesized that there will be significant positive differences in the six primary mood factors as well as the Total Mood disturbance score as measured by the Profile of Mood States (POMS) as a result of taking part in the theatrical performance program.

The following chapter is divided into four sections: (1) an overview of Duchenne Muscular Dystrophy (DMD), (2) The emotional adjustment to a physical disability, (3) The personality profiles of the physically disabled, and (4) Creative dramatics therapy. The first section provides a brief description of Duchenne Muscular Dystrophy, the focus being on the disease's characteristics, diagnosis, and those individuals at risk. The second section looks at the factors which influence the emotional adjustment/maladjustment of persons who are physically disabled. The third section examines the research on the impact of physical disability upon personality. The last section investigates the studies focusing on the effects of creative dramatics on the mood state of individuals who are physically disabled.

2.1 Duchenne Muscular Dystrophy

Duchenne Muscular Dystrophy is an inherited disorder which is characterized by progressive weakening and degeneration of skeletal muscle, without apparent defect in either the central or peripheral nervous system, resulting in death (usually between the ages of fifteen and twenty) due to inanition (lack of food intake), pneumonia, or cardiopulmonary complications (Hanson & Zellweger, 1968; Karagan, 1979; Moosa, 1974). Duchenne Muscular Dystrophy increasingly denies the body of movement and in the advanced stages of the disorder one loses the power to breathe. The disease does not affect the mind (Wolf, 1983). Individuals suffering from Duchenne Muscular Dystrophy remain painfully cognizant of their degenerating physical status.

Duchenne Muscular Dystrophy, the most common and fastest progressing of all the dystrophies, is an x-linked, recessive disease affecting males almost exclusively. Its incidence is approximately 279 per 1,000,000 male births. Affected females are very rare, with several of those diagnosed as having Duchenne Muscular Dystrophy being sex-chromatin negative suggesting Turner's syndrome (Hanson & Zellweger, 1968).

Diagnosis:

A diagnosis of Duchenne Muscular Dystrophy is confirmed upon finding clinical abnormalities, biopsy and electromyelogram examination aberrations, raised levels of creatinephosphokinase (CPK) enzyme, and a family history of other affected males (Karagan, 1979; Moosa, 1974; Sparta, 1983).

The disorder begins so insidiously that one may be unaware of its presence for many years. While evidence of the disease may be present at birth, clinical symptoms usually become apparent between the ages of two and six. There is often a lag in motor milestones in infancy. The child exhibits difficulty in climbing stairs and raising to his feet from a sitting or lying position. He has frequent unanticipated falls, cannot hop, jump, or run normally; and may develop a waddling gait. There may also be a seeming enlargement (pseudohypertrophy) of the deltoid, brachioradialis, quadriceps, and especially the calf muscles caused by fatty and connective tissue deposits (Firth, et al., 1983; Hanson & Zellweger, 1968; Moosa, 1974; The Muscular Dystrophy Association of Canada, 1984).

The most conclusive method by which to assess such deterioration is through muscle biopsy. Under the microscope,

dystrophic muscle can be seen to have an abnormal quality to it, showing non-uniformity in fiber diameter and permeation by fat and connective tissue (Moosa, 1974; The Muscular Dystrophy Association of Canada, 1984).

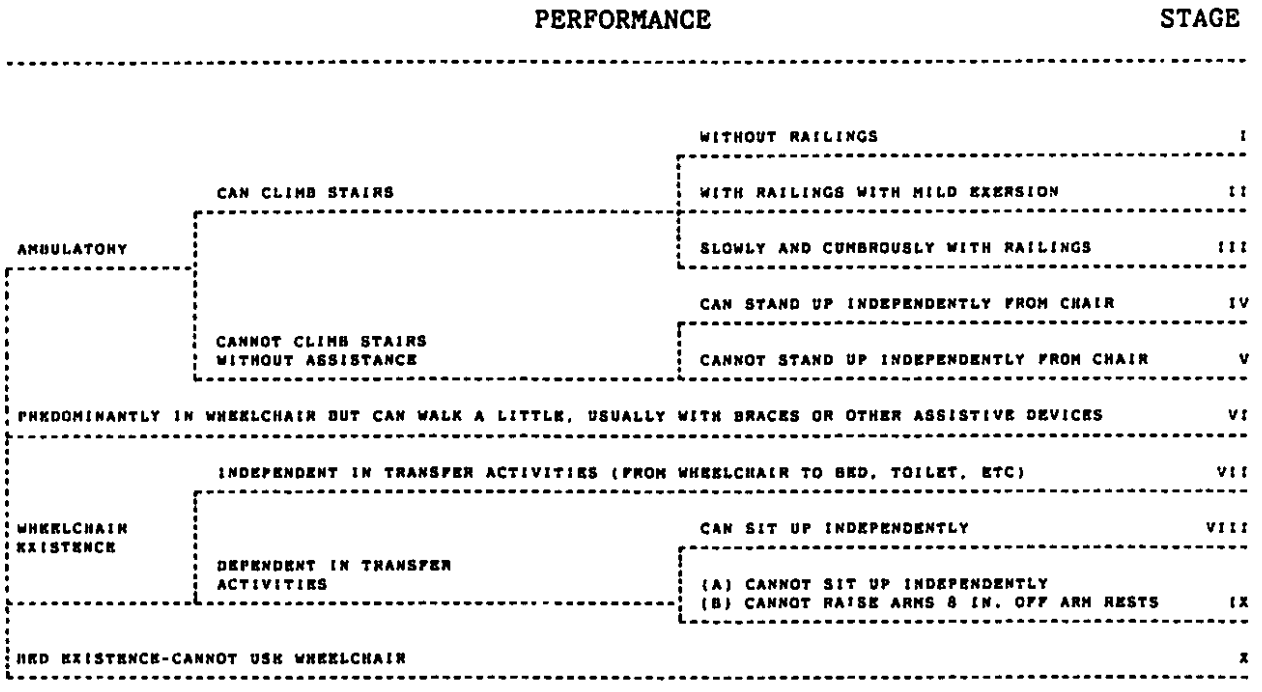
Stages of Disability:

The most thorough functional classification of Duchenne Muscular Dystrophy has been put forth by Zellweger & Hanson (1967). Using the ambulatory capabilities of Duchenne Muscular Dystrophy sufferers, a ten stage classification system has been developed (figure 1).

In the first three stages of the disease the muscular condition of the patients is sufficiently vigorous to allow them to compete reasonably well with their peers, thus preventing excessive frustrating experiences. In this grouping, children range in ability from being able to climb stairs without the aid of railings, to climb stairs with railings with mild effort, to climb stairs slowly and awkwardly with the aid of railings.

In the fourth and fifth stages, children, while still ambulatory, are handicapped in their physical activities to

FIGURE 1
FUNCTIONAL CLASSIFICATION OF TYPE III MD



ZELLWEGER & HANSON, 1967

the point where they no longer are able to compete with their normal peers. Individuals in the grouping show the greatest amount of frustration as they continue to participate in normal play activities. Unfortunately, while their normal peers' competency increases, their's declines. These individuals are no longer able to climb stairs without assistance and go from being able to stand up independently from a chair, in stage four, to not being able to stand up independently from a chair in stage five.

The sixth and seventh stages are characterized by children who are still able to get around, but need support when walking or require the use of a wheelchair. The majority of these individuals no longer actively participate in physical activities common to children their age. They are still independent in transfer activities such as going from wheelchair to bed or toilet but are, for the most part, confined to a wheelchair, needing braces and other supportive devices for limited walking.

Stages eight, nine, and ten are made up of severely affected patients. These individuals are dependent in transfer activities, and range from being able to sit up independently, to not being able to sit up independently or raise their arms eight inches off arm rests, to finally not being able to use a wheelchair.

2.2 The Emotional Adjustment to a Physical Disability

When looking at the literature on physical disability one finds that social and psychological factors play a more significant role in the general well-being of individuals who are physically disabled than do physical factors. Problems arising from the negative values placed on individuals who are physically disabled by society appear to be more prevalent and more damaging than are problems that are linked to decreased ambulation.

In the past, the focal point of disability problems lay in the bodies of the persons who were disabled. These individuals were forced to fend for themselves in a material and social world designed for the able-bodied. These individuals had to resign themselves to accept what "fate" and the existing system had consigned to them. Over the years, however, the focal point of disability problems has changed. Today the spotlight has shifted from the bodies of the persons who are disabled to the political, social, and legal systems which continue to deny individuals who are disabled the same opportunities guaranteed the able-bodied (Meyerson, 1988).

Meyerson, in the Journal of Social Issues' often cited

1948 special issue on the social psychology of physical disability, suggests that the negative values associated with physical disability can be considered in three ways: as negative values imposed by society, as negative values imposed upon the self, and as negative values imposed by the physical disability.

Negative values imposed by society:

Negative values can be imposed by society. Any deviation outside of height, weight, and to a certain extent shape, tends to bring societally imposed "positive" restrictions (Meyerson, 1948). For many years individuals with impaired ambulation and certain chronic diseases were, for the most part, not permitted to attend regular classes. Instead these individuals had to attend classes that were specifically set aside for students who were disabled but invariably taught by able-bodied teachers. This, however, is changing. Not only have school systems begun to integrate students with physical disabilities into regular schools and even regular classrooms (Forest, 1987), but attitudes towards integration are beginning to change. In a study measuring the attitudes of school superintendents towards the integration of students who are profoundly disabled into regular schools and regular class-

rooms, Stainback, et al., (1988) found that 62 of the 122 (50.5%) superintendents surveyed agreed with integration.

According to Stainback and Stainback (1984, 1986, 1987) a dual education system, one which has able-bodied students admitted to "regular" education (i.e. regular classroom) while students who are disabled are placed in "special" education (i.e. segregated classroom), excludes the students who are disabled from receiving the benefits of graduating from a "regular" education program. Instead the student who is disabled, upon graduation, receives the unimpressive title of graduate of a special education program.

The dual education system also keeps students who are disabled physically and psychologically separated from their able-bodied peers giving rise to de-individualization and stereotyping labels such as "retarded," "disturbed," or "disabled." Students who are severely disabled and confined to segregated classrooms show less social behavior towards other students than do students who are severely disabled but who have been integrated into classes with able-bodied students. Further, students who are disabled in integrated settings tend to display social behavior which has greater positive affect than students who are disabled in segregated settings (Stainback & Stainback, 1987).

School not only provides the basis in learning and academic skills necessary to a gainful adulthood but is also the center of interaction activity that builds friendships. Friendships significantly effect the way an individual views himself or herself and are critical contributing factors in social and emotional behavior as well as physical well-being (Duck, 1983; Lynch, 1977; Nelson & Aboud, 1985).

Individuals who have friends are more likely to have reassurance of their worth and value, a sense of belonging, and opportunities for communication and integration (Rubin, 1980). They also are likely to have more opportunities to receive and provide needed assistance and support (Duck, 1983). Studies have shown that a lack of friends and the resulting isolation and loneliness can have a significant negative influence on the social, psychological, and physical development of children (Asher & Gottman, 1981).

Research on the effect of the school environment on friendships has shown that among the determinants of friendship selection and peer acceptance is physical appearance. There is a strong tendency to select friends on the basis of appearance. When college students were given a photograph of either an attractive or unattractive child along with a description of an unacceptable behavior episode and were asked if the child in the photograph was likely to repeat the unac-

ceptable behavior the physically attractive child was judged to be less likely to repeat the unacceptable behavior (Dion, 1972).

Additionally, both children and adults attribute more desirable characteristics to attractive than unattractive children. Even when presented with only a photograph, attractive children are called independent, fearless, friendly, giving, honest, and self-sufficient, while unattractive children are said to be more aggressive, anti-social, and mean (Dion, 1972; Lerner & Lerner, 1977).

While many explanations have been advanced to account for the rejection of persons who are physically disabled, Wright (1960) expresses two different points of view.

First, individuals who are disabled are put at a disadvantage by a society that puts a premium on physical beauty. The media is constantly bombarding us with "beautiful" people, people who we should be like and with whom we should associate. Studies exist that support the position that attractive people are preferred to unattractive people for both same-sex friends (Geiselman, et al., 1984; Kernis & Wheeler, 1981) and opposite-sex friends (Huston & Levinger, 1978).

Second, Individuals who are disabled are less liked

because they are viewed as being different. This view appears to be substantiated by several studies. Byrne & Griffitt (1966) found that grade school children are more attracted to similar than to dissimilar peers, while other investigators have found that young children prefer to imitate similar rather than dissimilar models (Hartup & Coates, 1967). Peterson, et al., (1977) found able-bodied children prefer to imitate other able-bodied children, unless specifically rewarded for imitating disabled children (Apolloni & Cooke, 1978).

Finally, in studies done in integrated classrooms it has been shown that able-bodied children will play more often with other able-bodied children or with children who are mildy disabled rather than with those children with more severe disabilities and limitations (Peterson & Haralick, 1977; Guralnick, 1980; Rogers-Warren, et al., 1980; Peterson, 1982).

Negative values imposed upon the self:

If persons who are disabled internalize negative societal reactions to their disability and impose negative values upon themselves, these negative values become entrenched. Over time, these individuals will be inclined to become emotionally disabled as well as physically disabled (Meyerson, 1948).

Self-Image, according to Blum (1984), is an essential aspect of healthy psychological functioning in the adolescent. It correlates significantly with personality development, interpersonal relationships, family relationships, the ability to cope, mood, and even physical health.

In a study of 80 adolescent patients with chronic diseases and a matched control group, Seigal, et al. (1990) found that adolescents with chronic diseases had significantly lower self-esteem and higher levels of depression than the healthy matched controls. There was no statistically significant difference in the life events between the chronic disease group and the control group. Thus, the low self-esteem and higher levels of depression in the chronic disease group appear to be attributable to factors other than the somatic symptoms of their disease.

This view is supported by Beck's (1967) cognitive theory of depression which postulates that depression comes about when life's events activate latent negative cognitive schemata. As the individual interacts with his or her environment situations are encountered which trigger the schemata, bringing about readily available thoughts concerning one's inadequacies and frustrations. Depressed peoples' reasoning is

typified by a "systematic bias against the self" (p. 234) which brings about decisions and conclusions that have negative implications for the individual.

Individuals with high self-esteem can be seen as having a "built in" loving parent who is proud of their successes and tolerant of their failures. These individuals tend to be characterized by an optimistic orientation towards life, and are better able to withstand external stress without becoming excessively anxious. Like all individuals, high self-esteem individuals are at times disappointed and depressed by specific experiences, but they rebound quickly and without long-term disability. In contrast, individuals with low self-esteem are seen as having a "built in" disapproving parent who is harshly condemning of their failures, and register only short-lived pleasure when they succeed. Such individuals are more likely to be excessively sensitive to failure and rejection, to have low tolerance for frustration, to take an extended period of time to recover following disappointments, and to have a pessimistic view of life (Epstein, 1980). Those individuals who use a belief system that promotes negative self-assessments and dysphoric affect when dealing with daily events are more prone to depression than those individuals who do not have such belief systems (Beck, et al., 1979; Kuiper, et al., 1985; McClennan, 1987).

Negative values imposed by the physical disability:

Finally, negative values can be brought about by the disability itself through the inability of the individual to reach simple, universally achieved goals such as communication and locomotion (Meyerson, 1948). These are inescapable daily needs and the individual who is unable to perform them cannot help but have one failure follow another until aspirations in these areas are lowered to more attainable and realistic levels. With this lowering of expectations a concurrent adjustment is made in the thinking process, with statements such as "I failed x-times" becoming "I'm a failure" which may result in a variety of socially unacceptable behaviors.

Individuals who customarily provide stable, global, and internal explanations for their failures and external explanations for their successes are less likely to persist, take chances, or maximize their potential than those individuals who explain their failures as being unstable, specific, and external and their successes as being stable, global, and internal. Thus, internal, stable, and global attributions for negative outcomes denote that such outcomes are not a one time occurrence and that such outcomes are to be expected across a wide gamut of situations (Abramson, et al., 1978; Canino,

1981; Dudley-Marling, et al., 1982; Johnson, 1981; Kennelly & Mount, 1985; McCrone, 1979).

Metalsky, et al. (1987) examined the attributional styles of college students and how they interact with outcomes on mid-term examinations. They found depressive reactions to be more likely, more intense, and of longer duration when negative life events (poor grades) are attributed to stable and global causes than when negative life events are attributed to unstable, specific causes. Additionally, when negative life events are attributed to internal as well as stable, global causes depressive reaction are accompanied by lowered self-esteem.

While negative values may arise due to the individual who is handicapped actually being inferior in one or more areas this is not necessarily a social or psychological problem. It only becomes a social and psychological problem when the individual who is disabled, in order to achieve a goal, asks for help or tolerance. Having done this he or she is then compelled to reveal personal areas of his or her life space and accept from others the lower status, dependence, sympathy, pity, and curiosity that acceptance of help often entails (Ladieu et al., 1947). This very act of acceptance of help, therefore, begins a cycle where the disabled individual invariably loses some of his or her dignity which may lead to

psychological maladjustment often seen in the disabled.

The individual with an observable disability, therefore, experiences both the direct influence of self-perception and the influence related to the social responses of others. The individual's perception of his or her disability and the social responses of others constitute an ongoing interaction of conditions which may influence the individual's social and emotional development (Bandura & Walters, 1963).

2.3 Personality Profiles of the Physically Disabled

Research on the impact of physical disability upon personality has, for the most part, been based upon three main assumptions: 1) Specific forms of physical disability are associated with specific types of personality, 2) Certain types or degrees of disability in themselves cause psychological maladjustment, and 3) Different disabilities may result in similar environmental experiences due to similarly imposed functional limitations (Schontz, 1970).

Richman and Harper (1978) compared the behavioral characteristics and academic achievement of two groups of children with dissimilar physical disabilities (cleft palate and cerebral palsy) and a group of able-bodied children. The major

findings of this study suggest that the groups with the two disability types display significantly greater inhibition of impulse and lower academic achievement than the able-bodied children.

This finding of significantly more withdrawal behavior in children with cleft palate and cerebral palsy is congruous with clinical conjecture and several research studies. Children with cleft palate have been found to be less confident and aggressive as well as more nervous, while children with cerebral palsy have been noted as being less confident and showing of withdrawal behavior.

In a similar study, Harper and Richman (1978) attempted to determine whether there are personality differences between groups of adolescents with observable yet dissimilar physical disabilities (cleft lip/palate and orthopedic disability). Results indicate different adjustment patterns related to type of physical disability.

While adolescents with cleft palate displayed greater concern and pre-occupation over interpersonal interaction, the orthopedic disability group showed an isolative and passive orientation to interpersonal interaction. This may be owing to the fact that while both the cleft palate group and the orthopedic disability group had observable physical differ-

ences the orthopedic group also had ambulatory limitations which significantly limited peer contact having to do with physical activity and social activities (Harper & Richman, 1978).

Differences in personality profiles may reflect the impact of different forms of chronic observable disability. Patterns of behavioral inhibition established during preadolescence appear to be maintained in adolescence. However, personality profiles vary based upon the type of physical disability, with orthopedically disabled adolescents exhibiting an isolative approach to interpersonal interaction in addition to more generalized feelings of alienation (Harper & Richman, 1978).

Richman and Harper (1980) examined the personality status of young adults with observable yet dissimilar physical disabilities (cleft lip/palate and orthopedic disability) in order to discern whether there are significant differences between the two groups in adulthood.

Results of the study support the argument that different forms of chronic observable disability may have differing effects on the personality adjustment of adults. Orthopedically disabled individuals continue to display feelings of social alienation and an aloof orientation to interpersonal

interaction in adulthood, while cleft lip/palate young adults show less self-doubt and pre-occupation over interpersonal relations than cleft lip/palate adolescents.

In a study of fifteen to nineteen year olds with cerebral palsy or spina bifida, Anderson, et al. (1982) show that there is an association between the severity of the handicap and psychological maladjustment. Their findings indicate that individuals with moderate to severe handicaps are more likely to suffer higher levels of depression and anxiety as well as exhibit more antisocial behavior than those individuals with mild handicaps.

Harper (1978) compared disabled and able-bodied adolescents finding several significant differences between adolescents with moderate to severe physical disability and those without physical disability. Adolescents with multiple-orthopedic disability were characterized as isolative, pessimistic, self-centered, and alienated. There was, however, no evidence to suggest differential personality profiles among those individuals with congenital versus traumatic physical disability. This finding is in line with previous findings (McDaniel, 1969; Meyerson, 1955; Wright, 1960) which suggest that disability rather than the type of disability to be of prime importance upon personality development.

Breslau (1983), in a study examining psychopathology in children six to eighteen years of age with cystic fibrosis, cerebral palsy, myelodysphasia, and multiple handicaps, found that children with cystic fibrosis did not show an increased risk of psychopathology, while children from the three other groups showed an increased risk of psychiatric disorder in the area of mentation problems and isolation.

Using the Rorschach, the Thematic Apperception Test, and a series of drawings, Sherwin and McCully (1961) studied fifteen males with muscular dystrophy, ranging in age from ten to fourteen, over a period of one to three years. Their findings show that psychopathologic pictures in the children were, for the most part, mild to moderate in severity and that there was no psychopathology characteristic of individuals suffering from muscular dystrophy.

While there was no characteristic psychopathology there were several modes of behavior and defense mechanisms common to all the boys studied. Clinically, these individuals showed relatively little overt anxiety or depression even though findings suggest that muscular dystrophy and its specific threatening features present an unabating stress. Instead, their responses to the nature of muscular dystrophy seemed to be typified by quickly changing extremes between denial and acceptance: denial as to their ultimate fate at the hands of

the disease and acceptance in terms of their physical outlook.

These individuals appear to have a relatively retarded development of conscious controls over behavior, especially in the area of interpersonal and group activities. Their primary source of satisfaction and outlet for tension is an excessive reliance on fantasy. There appears to be a high degree of motivation for motor activities resulting, occasionally, in phenomenal accomplishments in these areas (Sherwin & McCully, 1961).

These findings differ from those involving children with fatal diseases such as leukemia where a resigned, fatalistic, or even depressed attitude has been reported and may serve as a mechanism against arousal or intense anxiety.

In light of this, Sherwin & McCully (1961) suggest that the findings of this study are relatively unique to individuals with muscular dystrophy. Perhaps the nature of the disease which embodies disabling, chronic, and progressive features as well as a deadly outcome can explain the unique mode of behavior displayed by the subjects of the study.

Of special interest, in view of the immature patterns of defense and excessive reliance on fantasy for gratification, is the comparative (relative) nonexistence of serious emo-

tional illness. Sherwin and McCully (1961) suggest two features which may account for this. First, these individuals appear to be isolated and protected from the stresses of life by their families. Second, and more important, the constant threat of imminent death, in addition to giving rise to anxiety and retarded emotional development, may prevent the development of psychopathological conditions, as other external stresses occasionally do, by monopolizing the individual's energy in an attempt to ward it off.

In a rare study focusing directly on Duchenne Muscular Dystrophy, Harper (1983) investigated the personality profiles of forty-four adolescent males thus affected. Results suggest that these individuals experience general discomfort in social situations, tend towards solitary pursuits, exhibit a shy behavior style, and evidence long-standing depressive feelings. Additionally, these individuals may experience difficulty associated with conflict in male role identification due to the inability for such pursuits imposed by their physical disability.

As the individual's health declines there are increasing feelings of social isolation and anxiety, as well as the adoption of a more passive style. There is also a difficulty in controlling egocentric impulses. Long-standing apprehensions may begin to surface as the individual with progressive dis-

ability continues to deal with increased physical limits on ambulation, lifestyle, and the ever present prospect of imminent death.

Individuals with Duchenne Muscular Dystrophy, therefore, appear to be inhibited, socially sensitive, passive males with long-standing feelings of dissatisfaction and hopelessness most probably caused by a physical condition that limits many opportunities for social interaction and participation during adolescence (Harper, 1983).

Finally, in a study pooling information obtained from the parents, teachers, and psychiatrists of persons who suffer from Duchenne Muscular Dystophy, as well as boys with Duchenne Muscular Dystrophy themselves, Fitzpatrick, et al. (1986) found an increased incidence of depressive disorders characterized by dysphoric mood, loss of interest or enjoyment in usual activities, and feelings of worthlessness.

The results of these studies offer support for the theory that individuals who are disabled are more vulnerable to adjustment problems.

It is important to note that things have changed over the past few years. With increased integration as well as normalization through assistance for persons who are disabled, in

both private and public settings, these individuals now have access and are able to participate in many activities that only a short while ago were out of their reach. Persons who are disabled now regularly live on their own, attend institutions of higher education, and engage in full-facitated interpersonal relationships (Kerr & Meyerson, 1987). Research needs to be done which takes account of these new developments.

2.4 Effects of Creative Dramatics on Mood

According to Courtney (1988) the creative arts foster psychological health. Participation allows one to make a statement about his or her identity which in turn helps build confidence and self-esteem. Further, the creative art therapies, including dramatics, provide an avenue for self-expression which promotes the development of one's innermost qualities thus allowing for optimal functioning.

While the psychological and social benefits of the creative arts are not culture specific, neither are the benefits restricted to any one group within a culture. The creative arts can be useful with all individuals, whether they be with the able-bodied, the mentally retarded, or the physically disabled (Courtney, 1988).

A fundamental purpose of creative dramatics is the development of one's personality. Through creative dramatics one becomes more aware of his or her senses, body, imagination, and intellectual capabilities as well as allowing one to refine their social skills (Warger, 1985).

Through dramatic play individuals can explore their environment, internalize experiences, and come more to terms with the real world (Slade, 1958).

According to Piaget (1968): "Practically every formal psychological activity is initially enacted in play. At any rate, play constitutes a functional exercise of these activities. Cognitive activity thus initiates play and play in turn reinforces cognitive activity.....(a) form of play very characteristic of young children..... employs thought, but thought is almost entirely idiosyncratic and has a minimum of collective elements. This is symbolic play or imaginative and imitative play (in which the child) remakes his own life as he would like it to be. He relives all his pleasures, resolves all his conflicts. Above all, he compensates for and completes reality by means of a function." (p. 23).

Creative dramatics effects one's emotional life in a symbolic fashion. Emotions brought forth in the creative dramat-

ics setting are aroused by fictitious story lines created by others which are separate from the emotions experienced in real life. In spite of this it is characteristic of the creative dramatics program that one fall in and out of acknowledging it as real and fictional. At one moment the performer is aware that he or she is simply an actor and in the next he or she is swept away by the part and begins to "live" it (Courtney, 1988).

In creative dramatics the individual, both actor and observer, undergoes an identification process which underlies emotion. This identification is not the simple reproduction of a behavior exhibited by the party being imitated; instead, it is the reproduction of a total role. The actor/observer "is" the person being imitated. Through this process of identification one expands the self by first imitating, then assuming, and finally internalizing the new role. In this way one mediates between inner emotion and its dramatic form (Courtney, 1980).

Throughout history imitative dance has been used as a way of relieving feelings of helplessness. By taking the anxiety an individual is feeling and giving it a "concrete" release through dance one then got the feeling that he or she did in fact have some control over personal existence (Bernstein, 1979).

The therapeutic function of dance also appears to be similar to that of dreams. According to Espenak (1981) both dance and dreams are created by the impulsive overflow of potent feelings, both give rise to primitive subject matter, and both provide one with a temporary leave of reality. Dance therapy takes the vague, shadowy, troubled feelings one has gnawing at him or her and draws them into a form and movement that is conscious and adaptive. Thus, one is able to experience extended periods of well-being associated with the suppression of reality, a reality that may be, at the very least, trying.

Dance, over the years, has served as the medium by which the dancer and audience directly or indirectly express major emotional states such as anger, joy, fear, and calm. In healthy individuals one finds the ability to release emotion through body movement. The excited movements of children on their way to an enjoyable activity, the depressed movements of a person who is grieving, or the forceful and purposeful movements of the angry individual as he or she approaches a confrontation are all examples of emotion expressed through movement. In individuals who are disabled, however, one sees a suppression or decrease of emotion which reduces the expulsion of energy discharge, thus lessening the expression of one's personality (Espenak, 1981).

According to Espenak (1981): "Dance in itself provides a sensory-oriented, as well as a motor experience, a combined impact of the two sensations. The first is derived from the auditory stimuli with response to rhythm, the second from the feeling evoked by the freedom of movement with the release of inner tensions. It produces a quality of spontaneous abandonment, a surge of natural spirit, a sensation of joy in being alive. This experience, half sensual, half spiritual, is therapeutic in itself as shown in history all over the world..... This joy in dance, even in the more moderate experience of normal people, serves almost as an antidepressant and as an awakener of a feeling of new possibilities of life, with a capacity of living in psychophysical harmony within oneself." (p. 10).

Not unlike actors in general, persons with disabilities present an image of themselves to their audience. The difference, however, comes in the form of preconceived expectations. While the able-bodied are, for the most part, spared such distasteful excess "baggage", the disabled are not. The audience has already "decided" what disability is and how disabled people should act (Warren, 1988).

Warren (1988) further states that the disabled actor is not only disabled by his or her way of doing things (i.e. in a wheelchair) but also, and of greater consequence, by social

expectations and the feelings these expectations foster. An individual can follow the course set by a judgmental society or reject it. The way an individual reacts to society's view of him or her can make the difference within the disabled person, while performing, in spite of emotional, mental, and/or physical limitations can begin to change the preconceived attitudes attributed to the disabled.

A description of the subject population, research methods, and procedure is presented in the next chapter.

Chapter 3: Methodology

The present study explores the effects of dance performance on the mood states of adolescents who have Duchenne Muscular Dystrophy. It is hypothesized that: 1) There will be differences in the mood states of adolescents who have Duchenne Muscular Dystrophy and able-bodied adolescents and 2) Participation in a theatrical performance program (wheelchair dance) will have a positive effect on the mood states of adolescents who have Duchenne Muscular Dystrophy. The following chapter is divided into three sections: (1) subjects, (2) instrumentation, and (3) procedure.

3.1 Subjects

Six male adolescents ranging in age from 16 to 23 served as the subjects in this study. The experimental group was made up of members of Mackay Center Stage, a group of adolescents who have Duchenne Muscular Dystrophy and who perform a theatrical performance program (wheelchair dance) for the public. All experimental subjects were drawn from a classroom made up exclusively of adolescents who have Duchenne Muscular Dystrophy at the Mackay Center, an institution for persons who are deaf and profoundly physically disabled.

3.2 Instrumentation

Data for this study was gathered using the Profile of Mood States (POMS) rating scale. The results of the rating scale were then explained and expounded on using interviews, both with the subjects and their classroom teacher.

Profile of Mood States (POMS):

The Profile of Mood States (POMS) rating scale is a self-report instrument that can be completed in 3 to 5 minutes and is an effective way of identifying and assessing changing affective states.

The Profile of Mood States (POMS) (See Appendix A) is a factor analytically derived inventory of 65 adjectives that describe mood or affective states (McNair, Lorr, & Droppleman, 1971, 1981). The POMS measures six identifiable mood or affective states: Tension-Anxiety (T), Depression-Dejection (D), Anger-Hostility (A), Vigor-Activity (V), Fatigue-Inertia (F), and Confusion-Bewilderment (C).

While the POMS is recommended essentially as a method of assessing change in the mood states of psychiatric outpatients

it can also be used as a method of assessing change in the mood states of normal subjects. Additionally, the POMS is useful in research involving adolescents since adjectives chosen to be included on the POMS have been restricted to those easily understood by an average individual. Thus persons with at least a 7th grade education have little or no difficulty understanding the POMS (McNair, Lorr, & Droppleman, 1971, 1981).

All subjects are read the following instruction:

> Below is a list of words that describe feelings people have. Please listen to each one carefully. Then tell me which answer from the five listed on this card best describes HOW YOU HAVE BEEN FEELING DURING THE PAST WEEK INCLUDING TODAY.

Test takers respond on a 5-point scale ranging from 0= not at all to 4= extremely. For example, on item 3 (Angry), the test taker will describe how angry he or she has been feeling over the past week including today, with possible answers being 0= not at all, 1= a little, 2 = moderately, 3= quite a bit, and 4= extremely. A score for each mood factor (Tension-Anger, Depression-Dejection, Anger-Hostility, Vigor-Activity, Fatigue-Inertia, and Confusion-Bewilderment) is then obtained by summing the responses for the adjectives defining each of the six factors of the POMS. A Total Mood Disturbance

(TMD) score can also be obtained by summing the scores (with vigor weighed negatively as it represents a positive affect and is therefore negatively related to the other POMS factors) on the six primary mood factors.

Internal consistency reliabilities of the six mood factors ranged from .84 (Confusion-Bewilderment) to .95 (Depression-Dejection). These estimates were determined using 350 male and 650 female psychiatric outpatients who were administered the POMS upon being admitted to a university medical center psychiatric clinic. Validity was determined by six factor analytic replications of the six mood factors done during the development of the POMS. An examination of the individual items defining each mood scale by Lorr, Daston, and Smith (1967) found support for the face or content validity of the POMS.

Additionally, while reliability and validity data are not presented for the TMD score, the intercorrelations among the six primary POMS factors suggest the measure to be highly reliable (McNair, Lorr, & Droppleman, 1971, 1981).

While data gathered through scales provide the researcher with valuable empirical information needed for statistical analysis, it is often not enough. The subject must, at some point, be dealt with in a more direct and personal manner.

"The experimenter doesn't know what experience of the subjects is embodied in the subject's behavior. What the psychological scientist calls 'data' is actually one mode in which the subjects disclose part of their being." (Jourard, 1968). What one is feeling is best known only to himself or herself. Researchers should supplement scales, which can only "approximate" what an individual is experiencing, with descriptive data in order to clarify the findings based on the use of scales. Therefore, in addition to the empirical data, informal measures were used to obtain descriptive data. This descriptive data was intended to complement and elucidate data gathered through formal means.

Interviews

Once the final testing had taken place the experimental subjects were interviewed in order that information not revealed in the statistical findings could be gathered.

Subject interviews:

Following completion of the testing the subjects were interviewed. Open-ended interviews were used. Questions were

presented in such a way as to encourage the subjects to recall as much of the experience as possible (See Appendix B). It was hoped that (a) the extent to which the subjects recognize ways in which they had changed as persons over the course of the dance performances and (b) factors within the experience which might give reason for any such change could be identified. This researcher used an interview format that probed subjects' responses for further information. For example, if a subject answered question 2 (Did taking part in the wheelchair dance affect you positively or negatively?) by saying he was positively affected, the researcher then asked him to explain specifically what positively affected meant.

Teacher interview:

At the conclusion of the school year the classroom teacher was interviewed. Open-ended questions were asked in order that she have the freedom to answer in any way she chose (See Appendix C). It was hoped that additional insight into the ways the theatrical performance program affected the subjects would come to light.

3.3 Procedure

During the school year 1987-88 the subjects of this study were administered the POMS seven times (one set of pre and post tests given before and after each of three performances).

The first testing (pretest 1) took place in December 1987, one week prior to performing, and was followed by a second testing (posttest 1) with two subjects each being tested 1, 3, and 5 day(s) after performing.

The third testing (pretest 2) took place in March 1988, one week prior to performing, and was followed by a fourth testing (posttest 2) with one subject being tested 1 day after performing and two subjects each being tested 3 and 5 days after performing. The change from 2 subjects being tested at each of 3 time intervals during the posttesting was necessitated by the death of one of the subjects.

The fifth testing (pretest 3) took place in May 1988, one week prior to performing, and was followed by a sixth testing (posttest 6) once again with one subject being tested 1 day after performing and two subjects each being tested 3 and 5 days after performing.

A seventh, and final, testing of the experimental sub-

jects took place one month following posttest 6.

Additionally, a separate test session was conducted at the beginning of the study using fifteen control subjects drawn from a local high-school in order to allow for a pre-experimental treatment comparison of affective states.

The spacing of the test sessions allows one to investigate, to a certain extent, both the short-term and long-term effects of the theatrical performance program.

The results of the Profile of Mood States (POMS) and interviews are analyzed and discussed in the next chapter.

Chapter 4: Results

The purpose of this study was to investigate the effect of a theatrical performance program (wheelchair dance) on the mood states of adolescents who have Duchenne Muscular Dystrophy. The basic assumption of the research was that there would be a positive change in the mood states of these individuals.

Collected data (POMS) was analyzed and interpreted using T-tests in order to answer the following questions:

1. Was there an initial difference in the psychological profile of the Duchenne group as compared to the Able-bodied group?
2. Was there a difference in the psychological profile of the Duchenne group pre and post performance?
3. Was there a lasting difference in the psychological profile of the Duchenne group from one test session to the next?
4. Was there a concluding difference in the psychological profile of the Duchenne group as compared to the Able-bodied group?

The Profile of Mood States (POMS) was used to gather the necessary data needed for this study. Test takers respond on a 5-point scale ranging from 0 (not at all) through 4 (extremely). A score for each mood factor is then obtained by

summing the responses for the adjectives defining each of the six factors of the POMS.

1. Tension-Anxiety (Factor T) is defined by adjective scales descriptive of heightened musculoskeletal tension.
2. Depression-Dejection (Factor D) is representative of a mood of depression accompanied by a sense of personal inadequacy.
3. Anger-Hostility (Factor A) represents a mood of anger and antipathy towards others.
4. Vigor-Activity (Factor V) is characterized by adjectives suggesting a mood of vigorousness, ebullience, and high energy.
5. Fatigue-Inertia (Factor F) shows a mood of weariness, inertia and low energy level.
6. Confusion-Bewilderment (Factor C) is characterized by bewilderment and muddleheadedness.

McNair, et al., 1971

Additionally, a Total Mood Disturbance (TMD) score can also be obtained by summing the scores (with Factor V, vigor, weighted negatively as it represents a positive affect and is therefore negatively related to the other POMS factors) on the six primary mood factors.

4.1 POMS Pre-test (Initial) Results

In order to determine if there were initial differences

between the psychological profiles of the Duchenne Muscular Dystrophy (DMD) group and the Able-bodied (A-B) group, scores on the POMS for the DMD group and the A-B group were examined prior to the commencement of the theatrical performance program. Means and standard deviations for the two groups on the six POMS factors, as well as on Total mood, are reported in Table 1.

The findings listed in Table 1 show that the DMD group attained higher (more negative) scores on all six mood factors as well as on the Total Mood Disturbance score than the A-B group. A breakdown of each factor shows that on the Tension scale the DMD group received a mean score of 11.8 as compared to 10.3 for the A-B group. On the Depression scale the DMD group received a mean score of 20.8 as compared to 6.7 for the A-B group. On the Anger scale the DMD group received a mean score of 17.2 as compared to 7.3 for the A-B group. On the Vigor scale the DMD group received a mean score of 11.8 as compared to 20.5 for the A-B group (the V scale is negatively weighed). On the Fatigue scale the DMD group received a mean score of 9.2 as compared to 6.2 for the A-B group. On the Confusion scale the DMD group received a mean score of 12.2 as compared to 6.7 for the A-B group. And on the Total Mood Disturbance score the DMD group received a mean score of 59.4 as compared to 16.6 for the A-B group (Figure 2).

Table 1

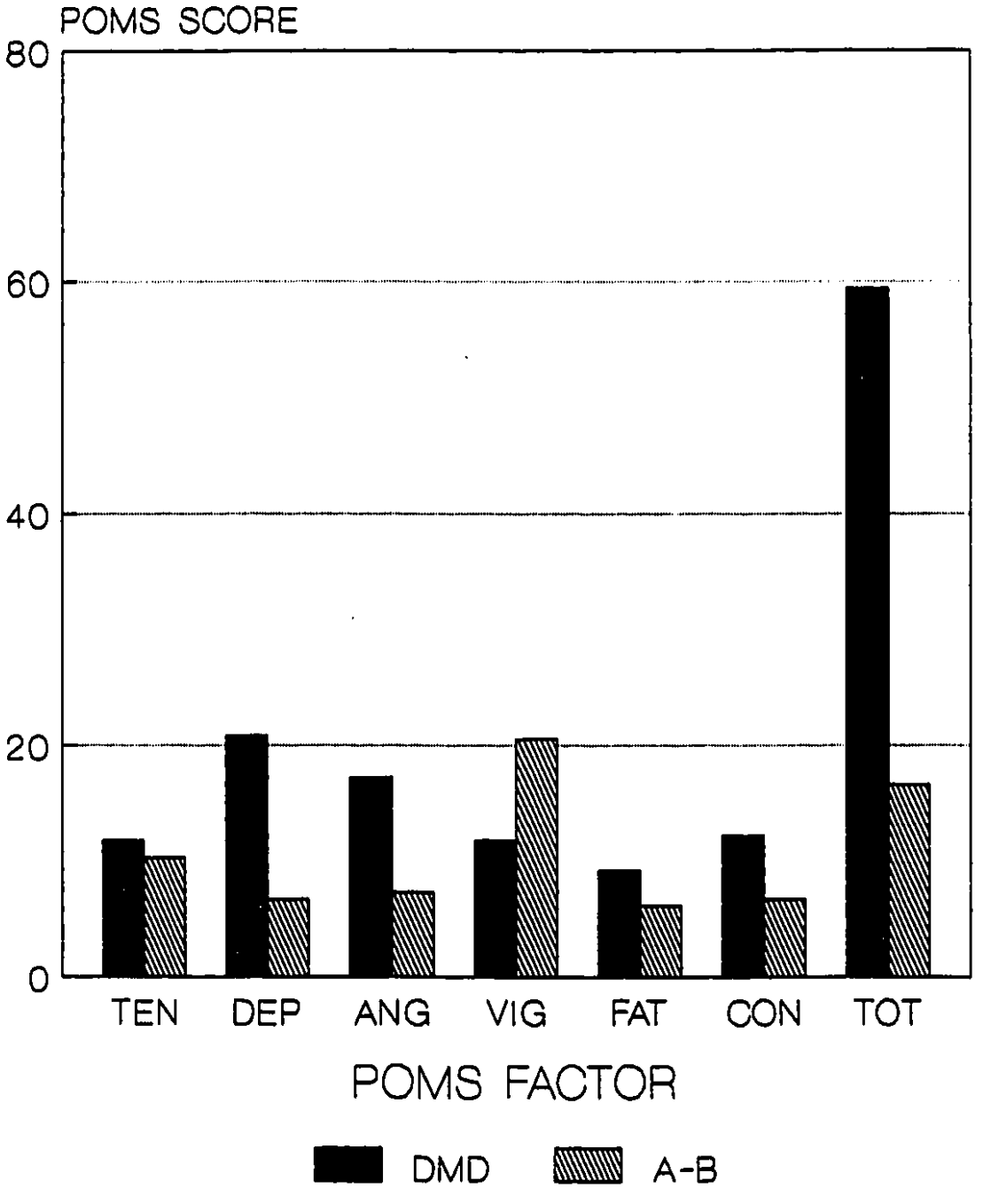
Mean Scores on the POMS
Pre-Treatment

POMS Variables	DMD		A-B	
	M	SD	M	SD
TENSION	11.8	06.57	10.3	03.90
DEPRESSION (*)	20.8	10.26	06.7	04.88
ANGER	17.2	11.26	07.3	03.86
VIGOR (*)	11.8	06.98	20.5	04.58
FATIGUE	09.2	07.89	06.2	02.68
CONFUSION (*)	12.2	05.26	06.7	01.35
TOTAL	59.4	24.56	16.6	14.07

(*) sig. $p<.05$

DMD n= 5
A-B n= 15

FIGURE 2
PRE-TREATMENT MEAN SCORES



To get a clearer understanding of the relationship between the DMD group and the A-B group, T-tests were performed with the six POMS scales as well as the TMD score serving as the dependent variables.

Results of the T-tests showed significant differences on the Depression scale ($p<.05$), the Vigor scale ($p<.05$), and on the Confusion scale ($p<.05$). In addition, while the scores on the Anger scale, Fatigue scale, and Total Mood Score did not reach significance the mean scores obtained by the DMD group were substantially higher, with all three factors approaching significance at the .05 level.

4.2 POMS Pre-Post (short-term) Results

While the examination of the initial differences between the DMD group and the A-B group gives one the contrast (Duchenne Muscular Dystrophy and Able-bodied) without intervention effect, an examination of the pre and post performance scores provides one with an indication of short term effects of the intervention program. Means and stardard deviations for each of the three pairs of pre-post scores on the six POMS factors, as well as on Total mood are reported in Table 2.

Table 2

Mean Scores on the POMS
Pre-Post

POMS Variables	Pre		Post	
	M	SD	M	SD
TENSION (*)	13.93	05.87	11.47	04.45
DEPRESSION (*)	18.87	08.48	13.13	07.85
ANGER (*)	16.47	10.38	11.00	07.12
VIGOR (*)	10.80	05.98	14.87	07.52
FATIGUE	10.13	05.36	11.27	04.82
CONFUSION (*)	12.53	04.93	08.67	04.65
TOTAL (*)	61.1	37.22	40.67	30.26

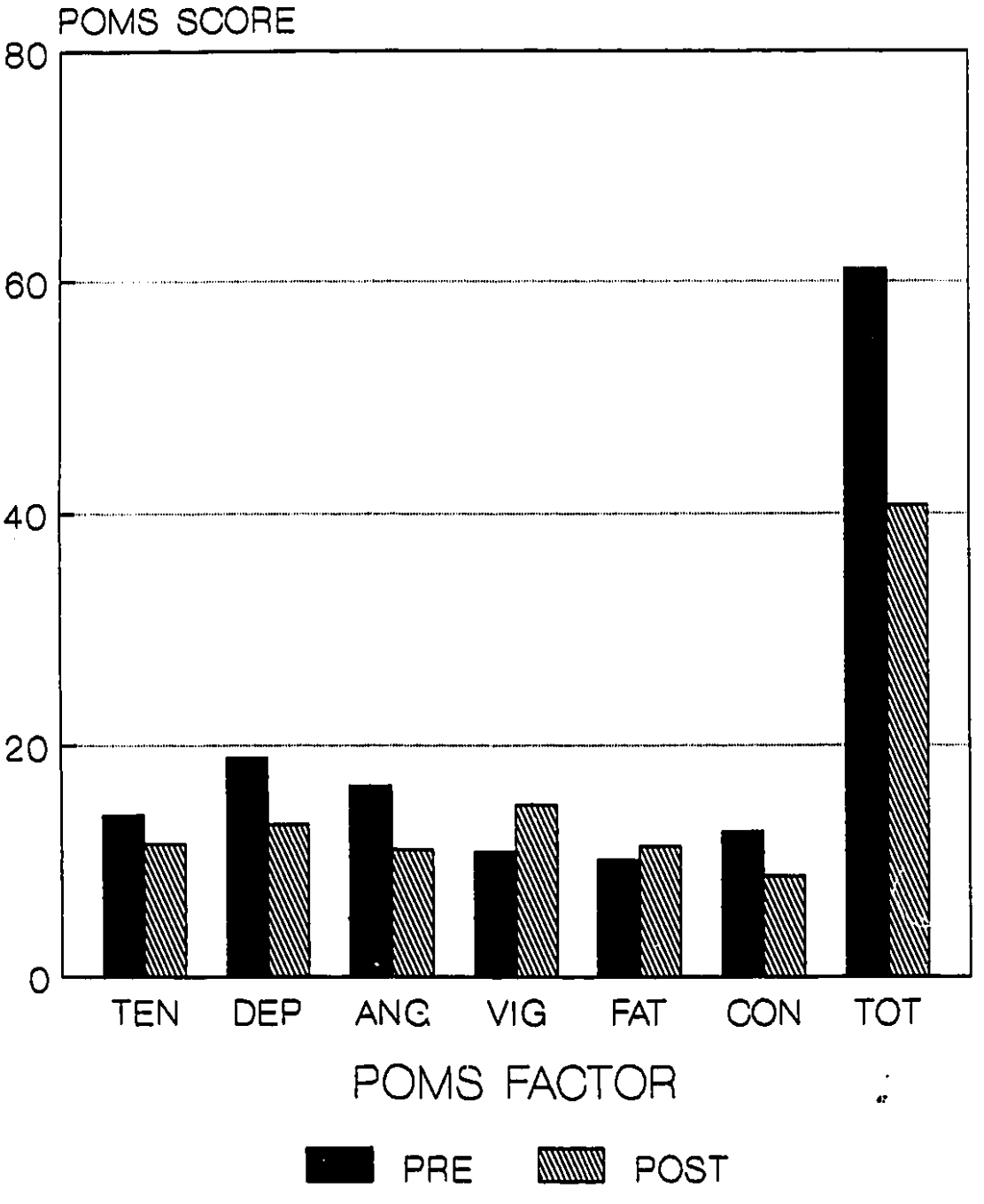
(*) sig. $p<.05$

n= 5

The findings listed in Table 2 show that the scores on each scale, with the exception of the Fatigue scale, as well as on the TMD score, moved in a positive direction (pre to post). A breakdown of each factor shows that on the Tension scale the mean pre-treatment score was 13.93 compared to a mean post-treatment score of 11.47. On the Depression scale the mean pre-treatment score was 18.87 compared to a mean post-treatment score of 13.13. On the Anger scale the mean pre-treatment score was 16.47 compared to a mean post-treatment score of 11.00. On the Vigor scale the mean pre-treatment score was 10.80 compared to a mean post-treatment score of 14.87. On the Confusion scale the mean pre-treatment score was 12.53 compared to a mean post-treatment score of 8.67. And on the Total Mood Disturbance score the mean pre-treatment score was 61.13 compared to a mean post-treatment score of 40.67. The only scale where the scores moved in a negative direction was the Fatigue scale where the mean pre-treatment score was 10.13 compared to a mean post-treatment score of 11.27 (Figure 3).

In order to get a better understanding of the overall short term effect that the theatrical performance program (wheelchair dance) has on the different moods, as put forth in the POMS, T-tests were performed with the six POMS scales as well as the TMD score serving as the dependant variables.

FIGURE 3
PRE-POST MEAN SCORES



Results of the T-tests showed significant pre-post differences on the Tension Scale ($p<.05$), the Depression scale ($p<.05$), the Anger scale ($p<.05$), the Vigor scale ($p<.05$), the Confusion scale ($p<.05$), and on the Total Mood Disturbance score ($p<.05$). The Fatigue scale scores, while moving in a negative direction, did not reach significance.

A further breakdown of the POMS factors into the 3 different pre-post test sessions gives one a more in depth look at the short term effects of the theatrical performance program. Mean and standard deviations for the six POMS factors, as well as on Total mood, over the three test sessions are reported in Table 3.

The findings in Table 3 show that on all factors, with the exception of the Fatigue factor, as well as on the Total Mood score, there was positive pre-post score movement. A breakdown of each factor shows that on the Tension scale mean pre-test scores of 11.8, 16.0, and 14.0 were recorded compared to mean post-test scores of 11.4, 11.0, and 12.0. On the Depression scale mean pre-test scores of 20.8, 21.8, and 14.0 were recorded compared to mean post-test scores of 17.8, 13.8, and 7.8. On the Anger scale mean pre-test scores of 17.2, 21.6, and 10.6 were recorded compared to mean post-test scores of 13.6, 12.8, and 6.6. On the Vigor scale mean pre-test scores of 11.8, 7.6, and 13.0 were recorded compared to mean

Table 3

Mean Scores on the POMS
Pre-Post

POMS Variables	Pre		Post	
	M	SD	M	SD
TENSION				
time 1	11.8	06.57	11.4	03.78
time 2 (*)	16.0	06.82	11.0	03.31
time 3	14.0	04.47	12.0	06.60
DEPRESSION				
time 1 (*)	20.8	10.26	17.8	08.70
time 2 (*)	21.8	08.87	13.8	07.33
time 3 (*)	14.0	04.80	07.8	04.76
ANGER				
time 1 (*)	17.2	11.26	13.6	09.71
time 2	21.6	12.93	12.8	04.97
time 3 (*)	10.6	02.51	06.6	04.67
VIGOR				
time 1	11.8	06.98	12.2	06.87
time 2	07.6	05.55	14.2	07.40
time 3 (*)	13.0	05.05	18.2	08.53
FATIGUE				
time 1	09.2	07.89	11.4	04.51
time 2	12.4	04.72	13.6	03.85
time 3	08.8	02.49	08.8	05.63
CONFUSION				
time 1 (*)	12.2	05.26	10.6	05.98
time 2 (*)	15.6	05.68	09.4	04.04
time 3 (*)	09.8	01.92	06.0	03.08
TOTAL				
time 1	59.4	45.81	52.6	37.67
time 2	79.8	41.18	46.4	26.51
time 3	44.2	16.02	23.0	21.77

(*) sig. p<.05

n= 5

post-test scores of 12.2, 14.2, and 18.2. On the Confusion scale mean pre-test scores of 12.2, 15.6, and 9.8 were recorded compared to mean post-test scores of 10.6, 9.4, and 6.0. And on the Total Mood Disturbance score mean pre-test scores of 59.4, 79.8, and 44.2 were recorded compared to mean post-test scores of 52.6, 46.4, and 23.0. Scores on the Fatigue scale brought negative pre-post movement with mean pre-test scores of 9.2, 12.4, and 8.8 compared to mean post-test scores of 11.4, 13.6, and 8.8 (Figure 4a, 4b, 4c).

In order to understand more clearly the short term effects that the theatrical performance program (wheelchair dance) has on the different moods at each test session, T-tests were performed with the six POMS states, as well as the TMD score, serving as the dependent variables.

Results of the T-tests showed significant pre-post test differences on the Tension scale (2nd test session - $p<.05$), Depression scale (1st, 2nd and 3rd test session - $p<.05$), Anger scale (1st and 3rd test session - $p<.05$), Vigor scale (3rd test session - $p<.05$), and Confusion scale (1st, 2nd and 3rd test session - $p<.05$). There were no significant differences for either the Fatigue factor or the Total Mood Disturbance score on any of the three test sessions.

FIGURE 4a
PRE-POST TEST #1

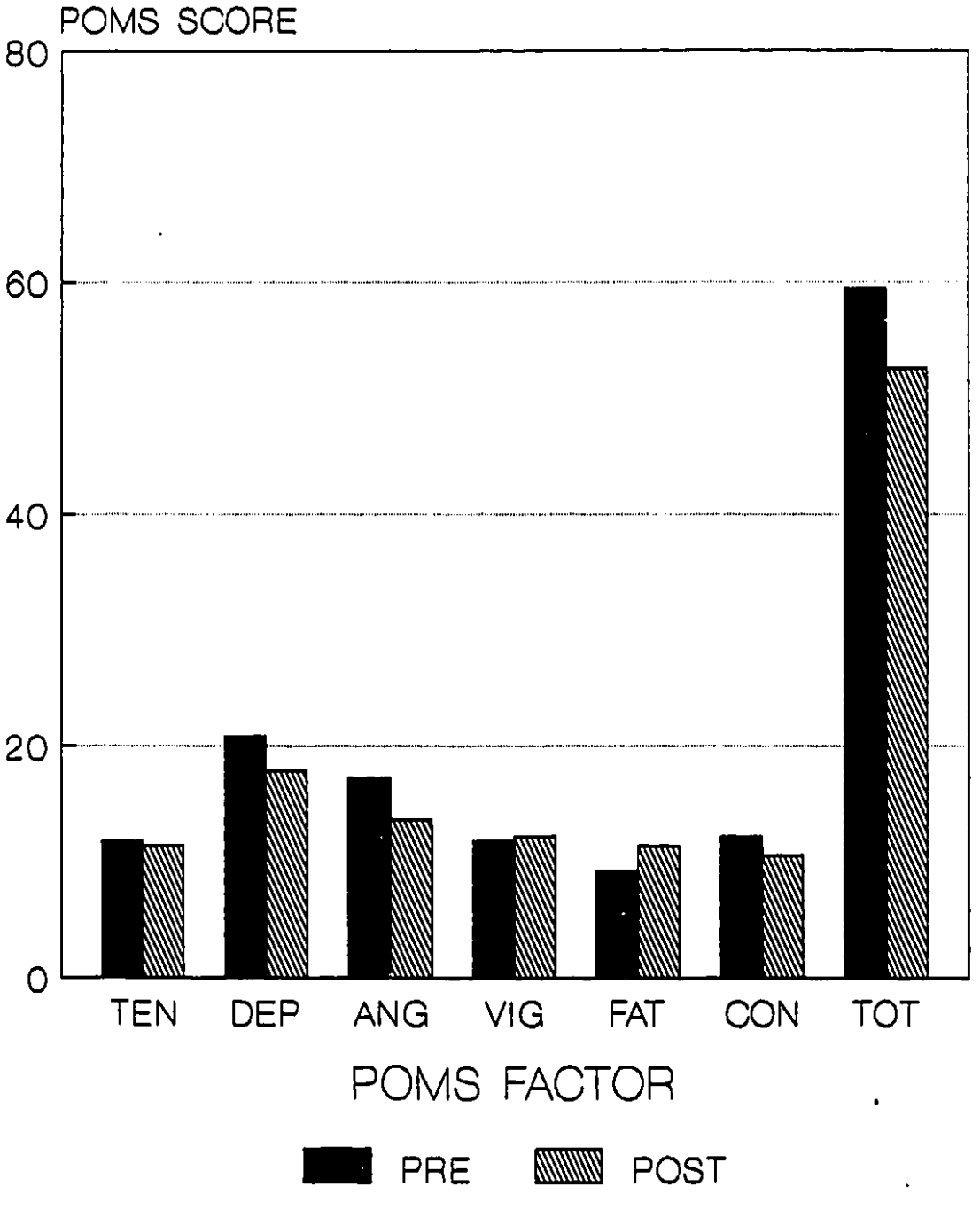


FIGURE 4b
PRE-POST TEST #2

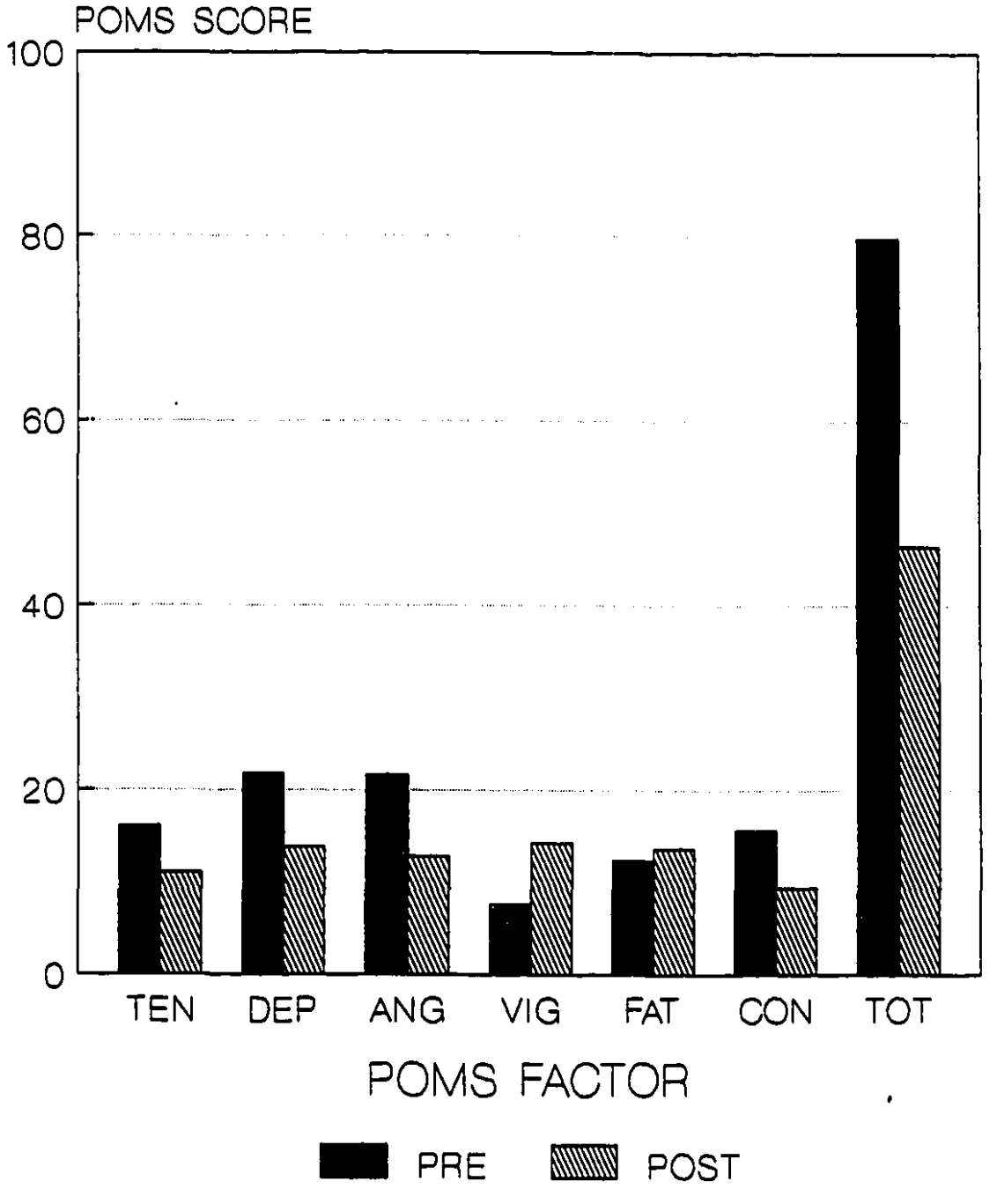
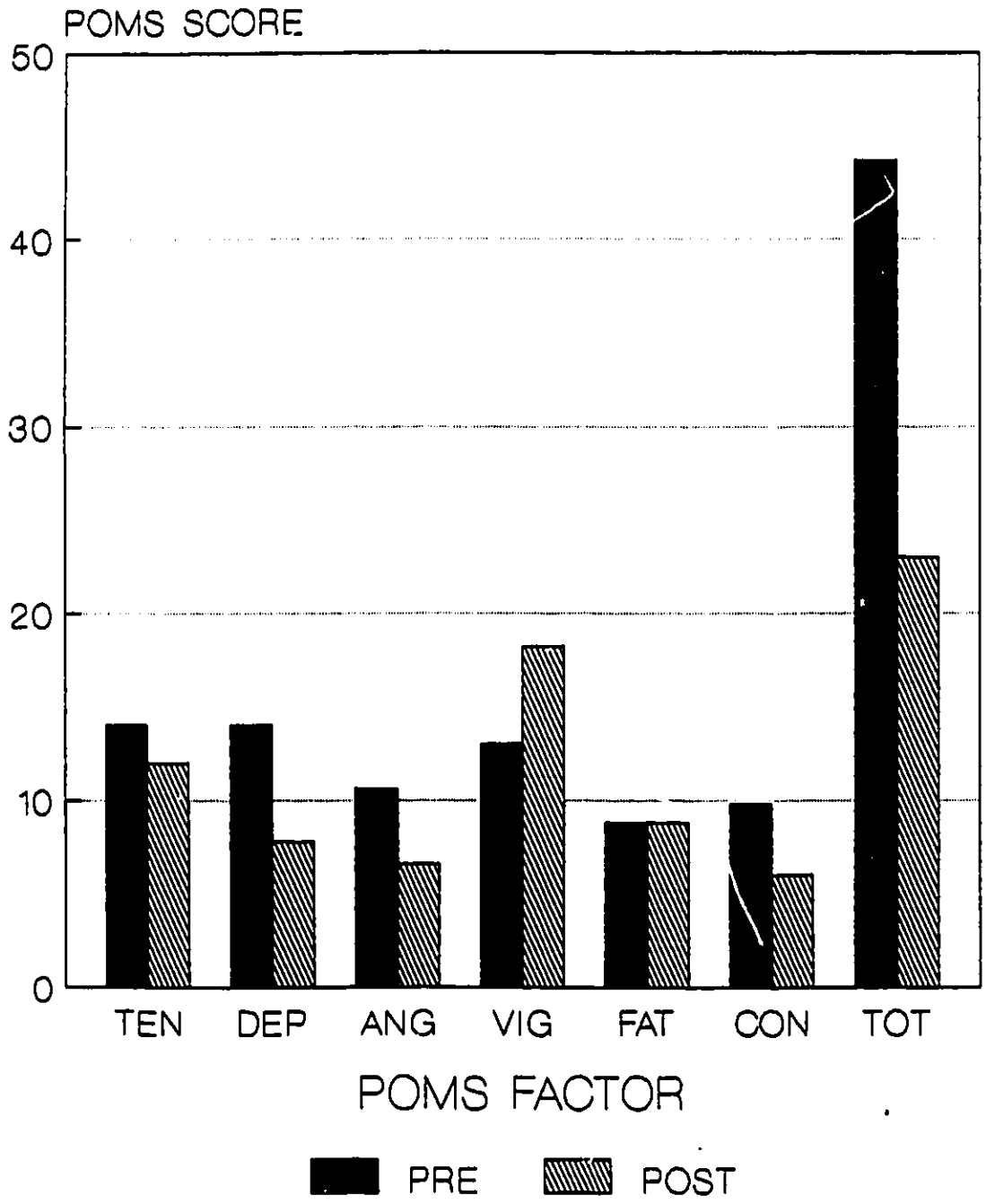


FIGURE 4c
PRE-POST TEST #3



4.3 POMS Pre-Pre (intermediate) Results

Having looked at the initial differences between the DMD-group and the A-B group as well as the short term effects of the theatrical peformance program we now turn to the intermediate effects of the program. A comparison of the pre-treatment DMD group scores provides us with an indication of the effectiveness of the program while it was current or in effect. Means and standard deviations for each of the pre-treatment scores on the six POMS factors, as well as on the Total Mood Disturbance score, are reported in Table 4.

The findings listed in Table 4 show that from pre-test session #1 to pre-test session #2 scores on all six mood factors as well as on the Total Mood Disturbance moved in a negative direction. Continuing through to pre-test session #3, however, one finds that scores rebound, with only the Tension scale remaining negative.

A breakdown of each factor shows that on the Tension scale mean pre-test scores move from 11.8 to 16.0 to 14, on the Depression scale mean pre-test scores moved from 20.8 to 21.8 to 14, on the Anger scale mean pre-test scores moved from 17.2 to 21.7 to 10.6, on the Vigor scale mean pre-test scores moved from 11.8 to 7.6 to 13.0, on the Fatigue scale mean pre-test scores moved from 9.2 to 12.4 to 8.8, on the Confusion

Table 4

Mean Scores on the POMS
Pre-Pre

TIME 1 vs. TIME 2

POMS Variable	Time 1		Time 2	
	M	SD	M	SD
TENSION	11.8	06.57	16.0	06.82
DEPRESSION	20.8	10.26	21.8	08.87
ANGER	17.2	11.26	21.6	12.93
VIGOR	11.8	06.98	07.6	05.55
FATIGUE	09.2	07.89	12.4	04.72
CONFUSION	12.2	05.26	15.6	05.66
TOTAL	59.4	45.81	79.8	41.18

TIME 1 vs. TIME 3

POMS Variable	Time 1		Time 3	
	M	SD	M	SD
TENSION	11.8	06.57	14.0	04.47
DEPRESSION	20.8	10.26	14.0	04.80
ANGER	17.2	11.26	10.6	02.51
VIGOR	11.8	06.98	13.0	05.05
FATIGUE	09.2	07.89	08.8	02.49
CONFUSION	12.2	05.26	09.8	01.92
TOTAL	59.4	45.81	44.2	16.02

n= 5

scale mean pre-test scores moved from 12.2 to 15.6 to 9.8, and finally, the mean pre-test scores on the Total Mood Disturbance scores moved from 59.4 to 79.8 to 44.2 (Figure 5).

In order to get a better understanding of the intermediate effect that the theatrical performance program (wheelchair dance) has on mood, T-tests were performed with the six POMS scales as well as the TMD score serving as the dependent variables.

Results of the T-test analysis failed to reveal any significant differences between pre-test #1 and pre-test #2 or between pre-test #1 and pre-test #3.

4.4 POMS Post-Pre (Long-term) Results

Finally, a comparison of POMS scores for the DMD group at the conclusion of the theatrical performance program and the A-B group allows one to examine the long-term effectiveness of the program. Means and standard deviations for the two groups on the six POMS factors, as well as on Total Mood, are reported in Table 5.

The findings listed on Table 5 show that the DMD group scored higher, more negative, on all six mood factors (with

FIGURE 5
PRE-PRE-PRE MEAN SCORES

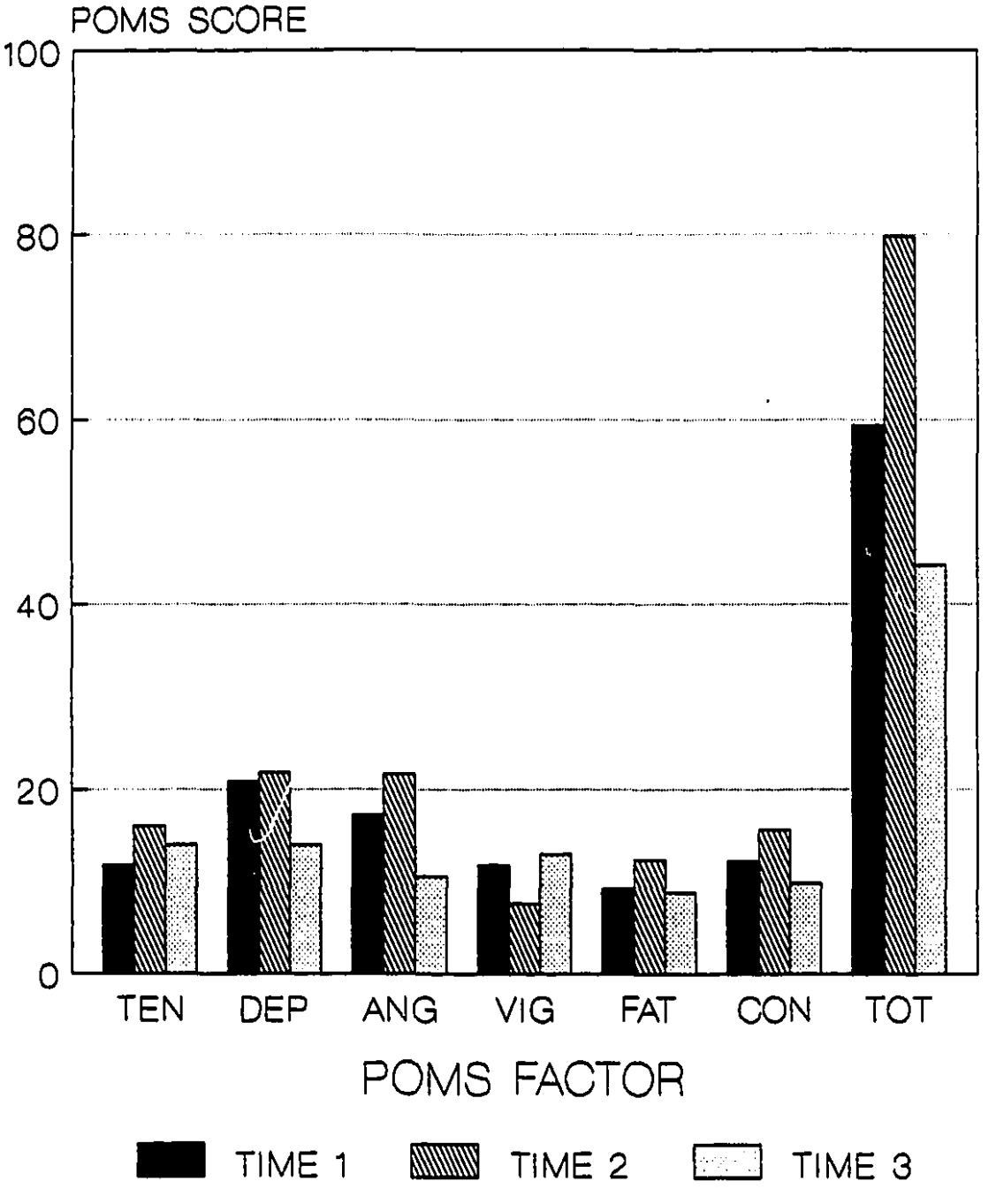


Table 5

Mean Scores on the POMS
Post-Treatment

POMS Variables	DMD		A-B	
	M	SD	M	SD
TENSION	13.8	04.32	10.3	03.90
DEPRESSION (*)	18.4	04.34	06.7	04.88
ANGER (*)	13.8	04.27	07.3	03.86
VIGOR (*)	12.6	04.22	20.5	04.58
FATIGUE	08.8	03.70	06.2	02.68
CONFUSION (*)	12.8	03.35	06.7	01.35
TOTAL (*)	55.0	21.42	16.6	14.07

(*) sig. $p<.05$

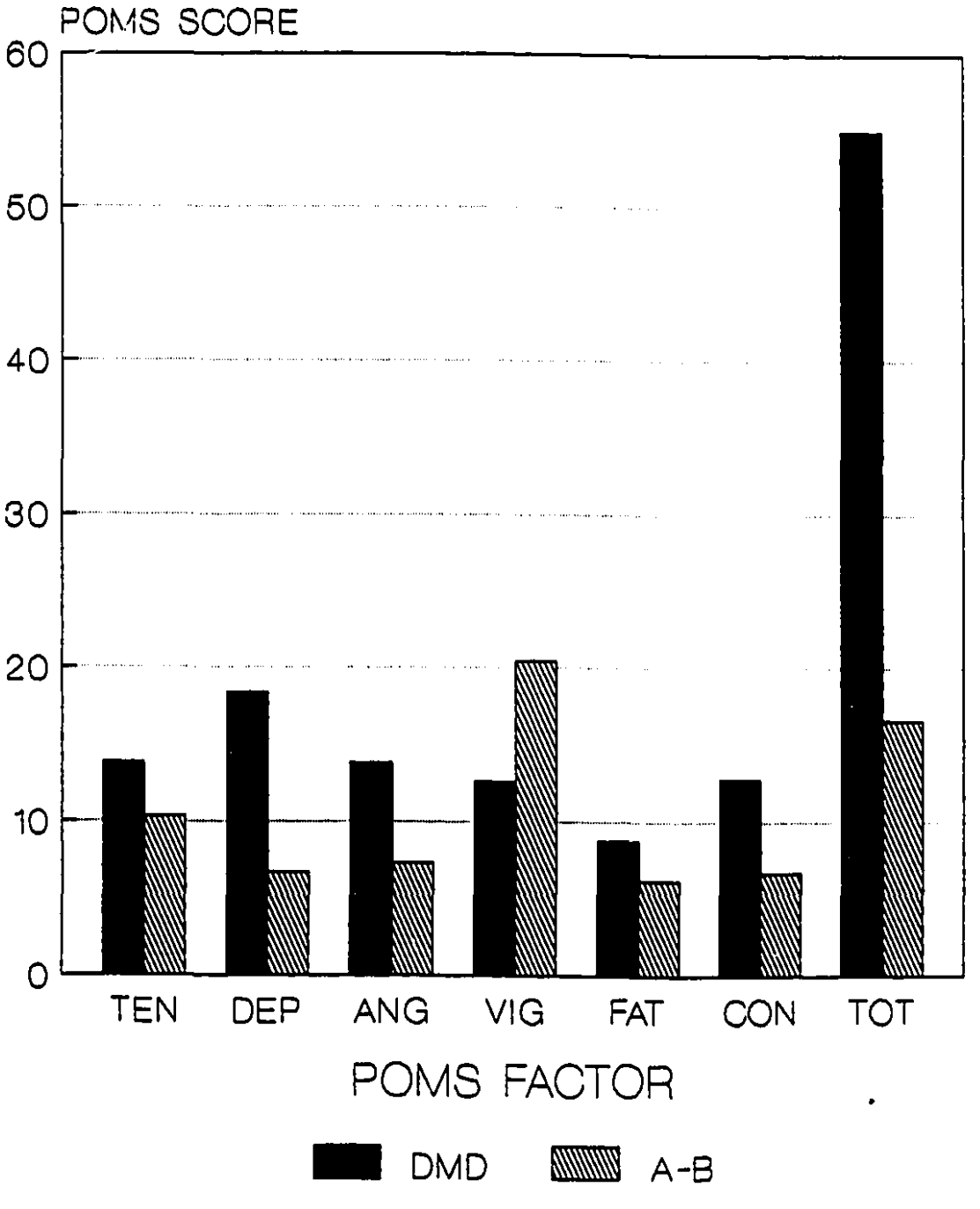
DMD n=5
A-B n=15

Vigor scores negatively weighed) as well as on the Total Mood Disturbance score than the A-B group. A closer look at each factor shows that on the Tension scale the DMD group received a mean score of 13.8 as compared to 10.3 for the A-B group. On the Depression scale the DMD group received a mean score of 18.4 as compared to 6.7 for the A-B group. On the Anger scale the DMD group received a mean score of 13.8 as compared to 7.3 for the A-B group. On the Vigor scale the DMD group received a mean score 12.6 as compared to 20.5 for the A-B group (the V scale is negatively weighed). On the Fatigue scale the DMD group received a mean score of 8.8 as compared to 6.2 for the A-B group. On the Confusion scale the DMD group received a mean score of 12.8 as compared to 6.7 for the A-B group. And on the Total Mood Disturbance score the DMD group received a mean score of 55.0 as compared to 16.6 for the A-B group (Figure 6).

To get a more accurate reading of the relationship between the DMD group and the A-B group, T-tests were performed with the six POMS scales as well as the TMD score serving as the dependant variables.

Results of the T-tests showed significant differences on the Depression scale ($p<.05$), the Anger scale ($p<.05$), the Vigor scale ($p<.05$), the Confusion scale ($p<.05$), and on the Total Mood Disturbance score ($p<.05$).

FIGURE 6
POST-TREATMENT MEAN SCORES



4.5 Interview Data

The analysis of interview data was carried out in order to gain a more in depth understanding of the effects of the theatrical performance program. While statistical findings provide a numeric reading of the effectiveness of a program, it is often through descriptive data that one gets a true understanding of the program effect.

Over the last few weeks of the theatrical performance program several interviews were conducted with the subjects of the study and their classroom teacher. Through these interviews a more comprehensive understanding of the effects of the program was brought forth.

Subject Interview

The following is a synopsis of the subjects' responses to several questions they were asked during the interview.

Question 1: What are your thoughts on the theatrical performance program?

The answer that came up most was that overall the theatrical performance program was enjoyable and fun to do (4 sub-

jects answered in such a fashion). When asked what aspects of the program was the most enjoyable all five subjects, without hesitation, answered by saying they enjoyed the travelling involved in putting on the performances the most.

Another answer that was mentioned often (by three subjects) was that the program gave them the opportunity to show the public that they could do things that the able-bodied could do. It gave them the opportunity to educate the public and begin to remove some of the stereotyping of persons who are disabled.

Question 2: What are some of the things you liked about the theatrical performance program?

For the most part this question was answered similar to question one. The respondents enjoyed the travel and the opportunity to show the public what they could do.

Question 3: What are some of the things you disliked about the theatrical performance program?

Very little was said regarding the negative aspects of the program. Most respondents were unable to come up with

anything that was negative. The nearest to a negative that was volunteered (3 subjects) was that the program was not as enjoyable towards the end. At first the subjects found the program very gratifying and a labor of love while at the end they found it frustrating and very tiring.

Question 4: How has the theatrical performance program affected you personally?

All respondents answered with very brief statements. They answered by saying that participation in the program has made them more self-assured and confident (4 subjects), less shy and more outgoing (3 subjects), less scared of being in the spotlight (3 subjects) and more willing to take chances (2 subjects). Overall it seems to have made them more well-rounded individuals.

When asked if the theatrical performance program had an affect on their mood states all of the respondents answered that they felt great following performances but that this only lasted for a day or two.

Question 5: How has the theatrical performance program affected the other members of the group?

This question was answered similar to question four. The respondents attributed to the other members of the group those same qualities that were brought out in themselves.

Question 6: Do you have any suggestions for change?

No suggestions for change were brought forth.

Teacher Interview

The following is a synopsis of the teacher's responses to several questions she was asked during the interview sessions.

Question 1: What is your general opinion with respect to the theatrical performance program?

I think it is of great benefit to the guys. Before the start of the program they basically kept to themselves, they were not very comfortable in situations involving the public. This, however, seemed to change as the guys got more and more involved in the program. They seemed to have more confidence and self-esteem. They were ready to meet the public head on and seemed to thrive in the spotlight.

As a form of expression it has given then opportunities they otherwise would not have had, both as performers and as travellers. It has given them the opportunity to view themselves as just performers and not as handicapped performers. It has allowed them to do things they were supposedly not able to do. It has been very educational for both the guys and the public.

Question 2: What changes, if any, did you see in those individuals who participated in the theatrical performance program?

As a group it made them much more cohesive. They became real friends, not just classmates. Individually they all appeared, at least to some extent, to gain in self-confidence. They truly enjoyed putting on a show and being the center of attention and it seemed to carry over off the stage.

Question 3: Specifically, have you noticed any changes in the self-esteem, self-concept, and mood of the individuals who participated in the theatrical performance program?

While there seemed to have been a great change in the self-esteem and self-concept of all the guys, only a couple seem to show any lasting changes in their mood. Since the guys have been involved in the program they view the opinions of others, in regards to themselves, as being more positive and this has rubbed off on them. They now are willing to take on challenges that they previously would not have dreamed of tackling and feel confident that they can succeed. In general, the guys seem to feel good about themselves.

As far as mood goes there appears to have been some positive change. When the group goes on tour the guys seem to be "on a high." They are extremely energetic and appear to be genuinely happy. This, however, does not hold true for all the guys when they are not touring. While a couple of the guys appear to have experienced some lasting positive change in mood, the majority appear to be very angry. This anger most likely was there from the start but it somehow seems more visible now.

Question 4: Do you have any suggestions for the future implementation of a similar program?

It appears to me that the biggest motivators for the guys are the travel and the audience appreciation. While the

wheelchair dancing is the backbone of the theatrical performance program I don't believe it would be nearly as successful, or enjoyable, if the guys didn't get to travel and perform in front of the audiences they perform in front of. With this in mind I would suggest that any future program incorporate these two very important factors.

The results obtained through the Profile of Mood States rating scale and through the interviews are discussed in the next chapter.

Chapter 5: Discussion

5.1 Profile of Mood States Results

Results showed significant differences, on several POM factors, between the DMD group and the Able-bodied group both prior to the commencement and at the conclusion of the study. The DMD subjects received higher, more negative, scores on all POMS factors (vigor scored negatively) over both test sessions with scores on the Depression, Vigor, and Confusion factors reaching significance on both pre and post study test sessions. An additional POMS factor, Anger reached significance on the post study test session.

Results also showed significant differences within the DMD group during the course of the study. The DMD subjects received lower, more positive, scores (vigor scored negatively) on all factors except Fatigue on the post treatment (performance) test sessions with scores on the Tension, Depression, Anger, Vigor, and Confusion factors reaching significance.

While results showed significant short-term improvement in Mood, as measured by the POMS scale, this improvement did not last from one treatment (performance) session to the next.

The immediate and marked improvement in pre-post treatment scores across all three pre-post treatment sessions appeared to have no long-term effect. Scores increased (negatively) dramatically between the first pre-treatment test session and the second pre-treatment test session before improving on the third pre-treatment test session. However, even with the improvement registered on the third pre-treatment session, the significant short-term gains appeared to be lost as significance was not reached with any POMS factor.

In summary, the findings of this study suggest that there is a significant difference in the mood profiles of adolescents who have Duchenne Muscular Dystrophy and able-bodied adolescents which persists in spite of the intervention (wheelchair dance performance). Additionally, while the DMD adolescents realize an immediate improvement in mood, as measured by the POMS, directly after performing this improvement is short lived, not lasting from one treatment (performance) session to the next.

These results appear to be in line with the research in the field. The significant differences between the DMD group and the Able-bodied group are supported by several investigations.

Harper (1978) compared disabled and able-bodied adoles-

cents revealing several significant differences between adolescents with moderate to severe physical disability and those without physical disability. Adolescents with multiple orthopedic disability were characterized as isolative, pessimistic, self-centered, and alienated. These characteristics; isolative, pessimistic, self-centered, and alienated; are conducive to much introspective thought, thought which may be focused on one's position in life.

Harper (1983) supports this in a study focusing on adolescent males afflicted with Duchenne Muscular Dystrophy. Findings showed individuals with DMD appeared to be inhibited, socially sensitive, passive males with long-standing feelings of dissatisfaction and hopelessness most probably caused by a physical condition that limits many opportunities for social interaction and participation.

Lastly, similar findings are seen in the research of Fitzpatrick, et al., (1986). Pooling information obtained from parents, teachers, and psychiatrists of DMD sufferers, as well as boys with DMD themselves, they found an increased incidence of depression and feelings of worthlessness in the majority of DMD sufferers.

While there was no long-term effect on mood as a result of the intervention (dance performance) there was a positive

short-term effect. All subjects experienced an improvement in mood state as measured by the POMS immediately following each performance. While this effect did not last from one test session to the next, it was evident in the time period immediately following each performance and lasted several days.

5.2 Interview Results

The responses of the subjects suggest that some positive change had occurred as a result of the theatrical performance program. Due to the open-ended nature of the questions, however, the subjects were unable to provide detailed answers. Instead they answered in the somewhat vague terms reported in the previous chapter. The researcher, for fear of influencing the responses, did not probe for more specific answers.

The responses of the classroom reacher reinforces the belief that positive change had occurred. While the classroom teacher was limited, for the most part, to the observation of behavior, the magnitude of the behavioral change shown by the subjects leads one to believe that positive change has indeed occurred.

The improvement that is realized as a result of the dance performance is quite understandable when one examines the cre-

ative dramatics literature.

According to Courtney (1988) creative dramatics effects one's emotional life in a symbolic fashion by bringing forth emotions that are aroused by fictitious story lines, emotions that are separate from those experience in real life. While the actor may be playing a fictitious role he or she will experiences moments where he or she is swept away by the part and begin to "live" it, a living which may be quite different from real life.

With creative dramatics the individual identifies with the role that is being assumed. This identification is not a mere copying of behavior, instead it is the reproduction of a total role. The actor "becomes" the person being imitated. Through this process of identification one internalizes the new role allowing one to mediate between inner emotion and its dramatic form (Courtney, 1980).

Finally, the therapeutic function of dance appears to be similar to that of dreams. According to Espenak (1981) dance is created by the impulsive deluge of potent feelings, giving rise to primitive subject matter, and providing one with a temporary escape from the hardships of reality. Dance therapy takes the vague troubled feelings one has and draws them into a form and movement that is conscious and adaptive. In this

way one is able to experience extended periods of well-being associated with the suppression of reality.

Limitations of the study and suggestions for future exploration are presented in the next chapter.

Chapter 6: Conclusion

The present study explored the effects of a theatrical performance program (wheelchair dance) on the mood states of adolescents who have Duchenne Muscular Dystrophy. The specific purpose of this research was to determine:

1. If there were any significant differences in the mood states of adolescents who have Duchenne Muscular Dystrophy and able-bodied adolescents.

2. If participation in a theatrical performance program would have a positive effect on the mood states of the adolescents who have Duchenne Muscular Dystrophy.

It was hypothesized that the adolescents who have Duchenne Muscular Dystrophy would show different, more negative, mood state profiles than the able-bodied adolescents. It was further hypothesized that participation in the theatrical performance program would have a positive effect on the mood states of the adolescents who have Duchenne Muscular Dystrophy.

Twenty-one male adolescents served as the subjects for this investigation. The experimental group was made up of six

members of Mackay Center Stage, a group of adolescents who have Duchenne Muscular Dystrophy and who perform wheelchair dance for the public. (the experimental group was reduced to five due to the death of one of the members of the group). The control group was made up of fifteen able-bodied adolescents drawn from a local high-school.

Using the Profile of Mood States (POMS) rating scale each subject (experimental and control) was tested at the beginning of the school year. The experimental group was then tested an additional five times during the school year (three post performance test sessions and two pre performance test sessions) and again one final time at the conclusion of the school year.

The analysis of the collected data showed significant differences, on several POMS factors, between the Duchenne Muscular Dystrophy group and the able-bodied group both before the theatrical performance intervention program and at its conclusion. Results also showed significant differences within the Duchenne Muscular Dystrophy group during the course of the theatrical performance intervention program. These significant differences within the Duchenne Muscular Dystrophy group, however, did not last from one treatment session (theatrical performance) to the next.

6.1 Limitations of the Study

While the statistical analysis of the data revealed significant differences between the experimental and control groups before and after the study as well as significant short-term effects on mood, the small size of the experimental sample may not allow for an accurate evaluation of the collected data. While the original size of the experimental sample (n=6) was inavoidably small to begin with, the subsequent reduction of sample size (n=5), due to the death of one of the subjects, almost certainly reduced the sample size to a point where the findings cannot be viewed as conclusive. A sample size of ten subjects is generally regarded as the minimum required for statistical reliability (Berman, 1983). While accuracy of a study increases with an increase in sample size a larger experimental sample could not be obtained as the researcher studied a group of individuals that were already an established group that numbered six. Had the experimental sample size been larger the results of this study could have been viewed as more definitive.

A second limitation of this study was that the initial data collection did not occur at the inception of the theatrical performance program. While the researcher gathered data prior to the actual performances, the subjects of the study had, by the initial test session, several months of rehearsals

under their belts, thus not allowing for a true "pre treatment" reading. While the initial test scores appear to be in line with what one would expect given previous research findings (Harper, 1978; Harper, 1983; Fitzpatrick, et al., 1986) the scores, nonetheless, cannot be considered unbiased pre-treatment scores. This shortcoming, however, could not be avoided as the researcher did not begin to work with Mackay Center Stage members until well after the group had been formed and rehearsals had begun.

A further limitation of the study involves the extraneous variables encountered as part of the overall Mackay Center Stage program. The group not only performed their theatrical performance program on stage in front of large audiences, but they toured many cities in North America in order to do so. The group spent up to two weeks away from home in such locations as Tucson, Arizona; Orlando, Florida; and Boston, Massachusetts. Not only were the Mackay Center Stage members away from home for extended periods of time, they were also away from most day to day authority figures such as parents. Mackay Center Stage members spent most of their time on these excursions with health care volunteers who they viewed as peers and who treated the members as if they were able-bodied, giving the trips the feeling of "camping get-aways" with friends. As the effects of the treatment program cannot be isolated from the additional variables brought forth by the

excursions, one cannot say, with any certainty, that the theatrical performances affected mood in any discernable way.

And finally, another limitation of the study was the interview technique of the researcher. The interview questions asked of the students and their classroom teacher were worded in a vague fashion in order to elicit unbiased answers. While the answers received were not influenced by the researcher, they were also not specific enough to draw any conclusions. The researcher was thus left to probe for answers that would be of use in evaluating the effectiveness of the theatrical performance program and in this respect the researcher may have lacked the necessary experience.

Given the limitations of this study: the small experimental sample size, the initial data collection session taking place after the theatrical performance program had already been instigated, the extraneous variables brought into play by the group's travels, and the inexperience of the researcher with regards to interview technique, there is a need for further research into the effects of creative dramatics on the mood states of adolescents who have Duchenne Muscular Dystrophy.

6.2 Recommendations and Research Implications

While the results reported in this study found significant differences between the experimental and control groups at the beginning and at the end of the study, as well as short-term positive change in the mood states of adolescents who have Duchenne Muscular Dystrophy, the research design does not exclude, or account for, several extraneous variables. Thus, one can only speculate as to the true effect of the theatrical performance program on the mood state of adolescents who have Duchenne Muscular Dystrophy.

In spite of these inconclusive results there is enough evidence to suggest that creative dramatics do effect mood to some degree. This was plainly seen by the researcher as well as the dozens of volunteers that gave their time to assist in the implementation and running of Mackay Center Stage. Further research should be conducted in order to determine the effect of creative dramatics in isolation of the aforementioned extraneous variables.

This study has attempted to examine the effects of creative dramatics on the mood states of adolescents who have Duchenne Muscular Dystrophy. The findings presented in this study show significant initial and concluding differences in the mood states of these adolescents in comparison with their

able-bodied cohorts. Additionally, a short-term pre-post treatment improvement was noted in the mood states of the adolescents who have Duchenne Muscular Dystrophy. This short-term improvement, however, did not sustain itself over time. These findings suggest that creative dramatics does have some effect on mood and that this research be used as a starting point for further investigation.

Appendix A

Profile of Mood States (POMS)

NAME _____ DATE _____

SEX: Male (M) Female (F)

IDENTIFICATION

Below is a list of words that describe feelings people have. Please read each one carefully. Then fill in ONE circle under the answer to the right which best describes HOW YOU HAVE BEEN FEELING DURING THE PAST WEEK INCLUDING TODAY.

The numbers refer to these phrases.

0 = Not at all
1 = A little
2 = Moderately
3 = Quite a bit
4 = Extremely

Col (C) O.P. (O)

	NOT AT ALL	A LITTLE	MODERATELY	QUITE A BIT	EXTREMELY
1. Friendly	0	1	2	3	4
2. Tense	0	1	2	3	4
3. Angry	0	1	2	3	4
4. Worn out	0	1	2	3	4
5. Unhappy	0	1	2	3	4
6. Clear-headed	0	1	2	3	4
7. Lively	0	1	2	3	4
8. Confused	0	1	2	3	4
9. Sorry for things done	0	1	2	3	4
10. Shaky	0	1	2	3	4
11. Listless	0	1	2	3	4
12. Peeved	0	1	2	3	4
13. Considerate	0	1	2	3	4
14. Sad	0	1	2	3	4
15. Active	0	1	2	3	4
16. On edge	0	1	2	3	4
17. Grouchy	0	1	2	3	4
18. Blue	0	1	2	3	4
19. Energetic	0	1	2	3	4
20. Panicky	0	1	2	3	4
21. Hopeless	0	1	2	3	4
22. Relaxed	0	1	2	3	4
23. Unworthy	0	1	2	3	4
24. Spiteful	0	1	2	3	4
25. Sympathetic	0	1	2	3	4
26. Uneasy	0	1	2	3	4
27. Restless	0	1	2	3	4
28. Unable to concentrate	0	1	2	3	4
29. Fatigued	0	1	2	3	4
30. Helpful	0	1	2	3	4
31. Annoyed	0	1	2	3	4
32. Discouraged	0	1	2	3	4
33. Resentful	0	1	2	3	4
34. Nervous	0	1	2	3	4
35. Lonely	0	1	2	3	4
36. Miserable	0	1	2	3	4
37. Muddled	0	1	2	3	4
38. Cheerful	0	1	2	3	4
39. Bitter	0	1	2	3	4
40. Exhausted	0	1	2	3	4
41. Anxious	0	1	2	3	4
42. Ready to fight	0	1	2	3	4
43. Good natured	0	1	2	3	4
44. Gloomy	0	1	2	3	4
45. Desperate	0	1	2	3	4
46. Sluggish	0	1	2	3	4
47. Rebellious	0	1	2	3	4
48. Helpless	0	1	2	3	4
49. Weary	0	1	2	3	4
50. Bewildered	0	1	2	3	4
51. Alert	0	1	2	3	4
52. Deceived	0	1	2	3	4
53. Furious	0	1	2	3	4
54. Efficient	0	1	2	3	4
55. Trusting	0	1	2	3	4
56. Full of pep	0	1	2	3	4
57. Bad-tempered	0	1	2	3	4
58. Worthless	0	1	2	3	4
59. Forgetful	0	1	2	3	4
60. Carefree	0	1	2	3	4
61. Terrified	0	1	2	3	4
62. Guilty	0	1	2	3	4
63. Vigorous	0	1	2	3	4
64. Uncertain about things	0	1	2	3	4
65. Bushed	0	1	2	3	4

MAKE SURE YOU HAVE ANSWERED EVERY ITEM.

POM 021

Appendix B

Subject Interviews

Question 1: What are your thoughts on the theatrical performance program?

Question 2: What are some of the things you liked about the theatrical performance program?

Question 3: What are some of the things you disliked about the theatrical performance program?

Question 4: How has the theatrical performance program affected you personally?

Question 5: How has the theatrical performance program affected the other members of the group?

Question 6: Do you have any suggestions for change?

Appendix C

Teacher Interview

Question 1: What is your general opinion with respect to the theatrical performance program?

Question 2: What changes, if any, did you see in those individuals who participated in the theatrical performance program?

Question 3: Specifically, have you noticed any changes in the self-esteem, self-concept, and mood of the individuals who participated in the theatrical performance program?

Question 4: Do you have any suggestions for the future implementation of a similar program?

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